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BOROUGH OF KEIGHLEY.



ANNUAL REPORTS

OF THE

MEDICAL OFFICER OF HEALTH,

THE VETERINARY INSPECTOR,

AND THE

BOROUGH SANITARY INSPECTOR,

FOR THE

Year ending December 31st, 1904.

KEIGHLEY :

F. DUNDERDALE, PRINTER, LAWKHOLME LANE.

Health Committee

Meets every alternate Wednesday at 7 p.m., in No. 2
Committee Room, Town Hall.



THE WORSHIPFUL THE MAYOR,

ALDERMAN J. SMITH, (Chairman).

MEMBERS, viz. :

ALDERMAN J. WALSH,

COUNCILLOR D. DRIVER,

COUNCILLOR M. HOWLEY,

„ W. DRIVER,

„ N. KING,

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MEDICAL OFFICER OF HEALTH:

WILLIAM SCATTERTY, M.A., M.D.

SANITARY INSPECTOR:

WILLIAM C. HALLER, ASS. SAN. INST.

DEPUTY INSPECTOR:

WILLIAM MITCHELL.

ASSISTANT INSPECTORS:

JOHN FOY.

FRANK WHITEHEAD.



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THE TWENTY-THIRD
ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR THE
Borough of Keighley.



TO THE MAYOR, ALDERMEN AND
COUNCILLORS.

GENTLEMEN,

I have pleasure in laying before you my Annual Report on the health and sanitary condition of the Borough for the year ending 31st December, 1904. In my report for the previous year I was able to state that a new record had been established in many respects, for instance, the lowest death rate, the lowest birth rate, the lowest zymotic death rate, and the least number of infectious diseases yet notified. Only in one instance has those records now been broken, and that instance no one who values the expansion and well-being of the Borough can view with satisfaction. I refer to the lowest birth-rate yet recorded, namely 23·3.

Steady progress, however, has been made in the policy advocated in my previous report with regard to the levelling up of our slums, and the removing of those insanitary conditions which form the environment of the poorer classes.

Last year I drew special attention to the heavy mortality, especially among infants, in both the Central and West wards, and the statistics of the year just closed only serve to emphasise the statements formerly made. As was then shown the improvident and the unfortunate in every town gravitate to the cheaper, and, by inference, the less sanitary neighbourhoods, but after making due allowance for this tendency it was, and still is, difficult to understand why these wards should compare so unfavourably with localities in other Wards where somewhat similar social conditions exist.

In the body of the Report you will find several items repeated from former Reports. This is in accordance with regulations received from the Local Government Board, pointing out that these Reports are for the information of the Local Government Board as well as for the Council of the district, and that a statement of the local sanitary conditions which may seem superfluous for the latter may often be needed by the former.

Physical Features and General Character of the Borough.—The Borough of Keighley is situated at the confluence of the River Worth with the River Aire, and, geologically, is built upon the millstone grit—a hard sandstone found in the coal measures. In few words, the nature of the soil may be described as loam, clay, gravel, and the subsoil as clay and grit. The town proper is intersected by the Worth, and its tributary the North Beck, while the Borough extends up the hill sides and includes as suburbs the villages of Hainworth, Thwaites Brow and Braithwaite. The height above sea-level varies from 300 to 950 feet. The area of the Borough is about 3600 acres, half being urban, half rural. At the census of 1901 the population was 41,564 and at the end of last year it was estimated to be 43,250.

The town may be said to depend almost entirely upon its manufacturing trade. The woollen industry supplies work for a large proportion of female hands, whilst iron works and various forms of machine making give employment to the bulk of the male population. Fluctuations in trade, therefore, may and often do have a direct bearing upon the general health of the community. Although during the past year trade has not been good, it cannot be said that any unusual amount of sickness could be traced to the depression.

Housing of the Working Classes.—No special action has been taken under the Housing of the Working Classes Act during the year, and yet numerous works have been carried out with the object of improving the dwellings of the poorer classes. As you are aware the Health Committee were compelled for financial reasons to give up the idea of dealing with certain areas as “insanitary areas,” and have since been treating individual houses on their merits or rather on their demerits. By this method many improvements have been carried out in a slower though no less systematic way.

In former years while considering the subject of house accommodation, I gave the number of new houses certified during the year as fit for habitation. I do so again, and for comparison give also the numbers certified in the several Wards for the previous few years :—

Ward.	1898	1899	1900	1901	1902	1903	1904
Central ...	5	13	7	2	0	6	0
East	26	45	25	23	16	27	7
N. East ...	72	97	55	96	49	34	61
N. West ...	151	134	67	47	31	38	20
West	27	45	33	30	16	16	18
South	35	50	35	28	27	3	19
	316	384	222	226	139	124	125

It may be merely coincidence, but if so it is all the more strange, that if for a series of years we arrange the Wards in order according to the number of new houses erected, we find that the order is nearly the same as if arranged according to Infant Mortality. If this fact partakes more of cause and effect than of coincidence, the inference is obvious. The more provident classes are the best able to move into new that is better houses, and the poorer classes into old and dilapidated houses, and since the lowest Infant Mortality is recorded among those inhabiting newer houses it follows that poverty is the largest factor producing the high death-rate among infants. I do not wish to carry this line of reasoning too far, but seeing the subject of Infant Mortality is of the greatest import to every community, any facts bearing on this subject help to stimulate thought, and thought may lead to action.

Sewerage and Drainage.—As previously reported the sewerage of the Borough is completed, except for the hamlet of Hainworth and some outlying farms, where the sewage is naturally run on to cultivated land. The length of new sewers put in during 1904 was 599 lineal yards.

Corresponding progress has been made in house drainage, not merely in making new connections to new sewers, but in inspecting and remedying old drains where met with. When I remind you that previous to paving any street every house drain in that street is put into sanitary condition, and that 1927 lineal yards of street were paved during the past year it will be seen that much systematic drainage work has been done. In addition there has been the work necessary to remedy defective drainage in houses where infectious disease has occurred or where complaints have led to inspections in all parts of the Borough.

Sewage Disposal.—The removal of night soil by tumbler carts is gradually being superseded by the more general adoption of water carriage. There are still, however, nearly 3000 tub closets in the Borough, and these are emptied weekly, or as required, by the Corporation workmen, and carted by night to the Sewage Farm.

When the privy accommodation is defective or deficient the Health Committee continue to carry out the decision of the Council requiring a separate w.c. for each house. This requirement is regarded by many property owners as unnecessary, especially when the property is old and dilapidated. When, however, such property is occupied by tenants who are not particularly careful or cleanly, and when three, four, or five families all go to the same tub closet, it is impossible to fix the responsibility in the event of the closet being so filthy as to be a nuisance. Each case is taken upon its merits, and in weighing the economic against the hygienic, the Committee have regard to the decision of the Council in favour of one closet per house, whether this house is old or new.

The Sewage Farm consists of nearly 60 acres, of which 50 are laid out in beds, on the principle of intermittent downward filtration. During the summer the refuse tip caught fire on more than one occasion, and the smell therefrom seemed to give rise to complaints of mismanagement at the sewage farm.

The small bacterial tanks, during prolonged experiment, turned out such a satisfactory effluent that the special drainage

Committee have decided to meet the increased demands upon the farm by constructing settling tanks and bacteria beds on a larger scale.

Removal and Disposal of House Refuse.--House refuse is removed once a week, or as often as necessary by the Corporation workmen, and tipped upon an extensive and very suitable site near the gas works. In the appended report of the Sanitary Inspector you will find the subject of Refuse Removal and Street Scavenging fully detailed.

Water Supply.—The Water supply, entirely in the hands of the Corporation, is derived partly from springs, but principally from gathering grounds at Stanbury, Trawden, Oakworth, and Haworth Moors, some five to eight miles west of Keighley. To prevent pollution from surface manuring, several farms adjoining the Moorlands were recently purchased by the Corporation. There still remains a small area known as South Dean, the drainage from which might pollute the Sladen Valley supply unless precautions be taken against such a contingency.

The Water is naturally pure but somewhat brownish in colour from the peaty gathering ground. Like all moorland supplies it has an acid reaction produced by certain bacteria present in peat. To remove the peaty colour as well as to help in neutralising the organic acid which gives peaty water its solvent action on lead pipes, the water supply is filtered at Oldfield through coke, sand, lime-stone, and polarite. The degree of acidity varies from time to time, being largely dependent upon temperature, rainfall, etc., and consequently a varying amount of alkali has to be added to the storage reservoir to destroy the solvent power of the water. I frequently examine water which has stood in lead service pipes during the night, and find that amounts of ammonia alkalia, varying from 100 to 200 lbs., must be added daily to effectually guard against the possibility of lead poisoning. The necessity for adding this alkali would be obviated by increasing the amount of hard spring water, and allowing the storm waters to pass into the compensation reservoir. I am glad to say this matter is receiving the earnest attention of the Water Committee.

The average daily consumption of water for domestic and trade purposes is about 28 gallons per head of the population. Generally speaking there is a plentiful supply, and only during a prolonged drought has any restriction been put on the consumer to limit the amount used for swilling door-steps and watering

gardens. The only exception to this plentiful supply are Hainworth and some scattered cottages and farms which are dependent on springs and shallow wells.

Milk Supply.—The milk purveyed in the Borough continues good. As may be seen by the appended Reports of your Veterinary Inspector and Sanitary Inspector, active supervision of cows and cow-sheds has been maintained during the year. Every milch cow is periodically examined by the Veterinary Inspector, who reports favourably upon the small amount of tubercular disease of the udder among dairy cows—a condition of things satisfactory both to the farmer and the consumer.

Places over which the Corporation have supervision
—Lodging Houses, etc.—In the six registered common lodging houses there is accommodation for 400 persons. There are about 21 houses registered as “furnished apartments.” With such ample provision for a floating and migratory population there is no overcrowding, while at the same time there is every inducement for the tramping fraternity to sojourn sufficiently long to leave the infection of small pox behind them in their passage between West Riding and Lancashire towns. A regular system of inspection is maintained, and on the whole these houses are kept in fairly satisfactory condition. During the past year the lodging-house keepers have had to supply daily lists of all persons lodging with them, and though this has entailed an amount of work of which they sadly complain, it has helped the Health department to keep a better watch on tramps suspected of coming from or going to towns where Small Pox was prevalent.

Offensive Trades.—With one exception no complaint has been made, and no serious fault has been found with regard to the way in which these businesses have been carried on. The tallow melting works in Temple Row have, however, been so seriously complained of, in spite of repeated warnings, that the Health Committee have instructed the Town Clerk to insist upon compliance with the bye-laws regulating this trade. Dwelling-houses and business premises have been erected all round those old-established works, so that although the trade processes are conducted in the same manner as during the past fifty years, the nuisance from offensive effluvia is now more keenly felt than formerly. That, of course, is not the fault of the proprietor, but on the other hand it is natural that house-holders and business people living near should demand that the best known practical

means should be taken to prevent the trade processes becoming a nuisance to others.

Slaughter-houses.—Nothing fresh can be said with regard to these. Of the 14 registered and licensed slaughter-houses only two or three have been built for their present purpose, and as a result their position, internal arrangements, and sanitary provisions are not the most suitable for the preparation of human food. It is only just to the occupiers to state that they are anxious to conduct their business with care and cleanliness, and considering the means at their disposal, their efforts are fairly successful. With few exceptions they notify the presence of suspected disease, and thus escape prosecution in the event of the carcase being found unfit for human consumption. The slaughter houses are visited with regularity, and every endeavour is made to secure a meat supply free from tuberculosis or other disease.

On several occasions during the year whole carcasses, both of cows and pigs, have been condemned on account of generalised tuberculosis. As I have formerly stated this extreme measure is only taken when your Veterinary Surgeon agrees with the Sanitary Inspector and myself that the public welfare demands the destruction of the whole carcase. It cannot be said that a butcher willingly surrenders a whole beast without any prospect of compensation, nor do your officials condemn the same without feeling the responsibility of their position. In the case of pigs suffering from tuberculosis, great reluctance is shown by the owners to the destruction of the whole carcase. For instance, a cow with localised tubercle can be so dressed that all but the diseased part is allowed to pass, but in the case of a pig, the Royal Commission on tuberculosis laid down the rule that: "In view of the greater tendency to generalisation of Tuberculosis in the pig we consider that the presence of tuberculous deposit *in any degree* should involve seizure of the whole carcase and of the organs."

Factories and Workshops.—There are 96 Factories and
 159 Workshops on the Registers. Many of the former and all the latter have been regularly and systematically inspected. Those previously on the register have been from time to time re-inspected, and all new workshops when opened have been examined and measured up—notices having been affixed in each room specifying the number of persons who may legally be employed ordinarily and overtime. The following list compiled from the 1904 register shows the number workshops inspected, and the number of persons employed:

Trade or Business.		No. of Rooms.	No. of Persons Employed.	No. persons who may legally be employed.	
Description	No.			Ordinary.	Overtime.
Tailors	26	38	165	382	230
Drapers, Dress & Mantle Makers, Costumiers and Milliners	35	43	158	337	201
Hosiers and Shirtmakers	3	3	18	44	26
Shoemakers, Cloggers, and Saddlers	25	29	71	244	145
Tinners and Plumbers ...	4	5	18	143	89
Jewellers	7	7	13	55	32
Tripe Dressers	4	4	10	69	42
Cycle Makers	2	2	4	20	12
Skep Makers	2	2	2	17	10
Blacksmiths	2	2	5	76	48
Pork Butchers	3	3	5	14	8
Underground Bakehouses	15	18	20	86	51
Other Bakehouses	28	31	69	276	167
Upholsterers, &c.	3	4	9	57	31
Total	159	191	567	1820	1092

Sanitation.—No instance has occurred in which it was necessary to enforce special cleansing or whitewashing. No tendency to overcrowding was detected. As may be seen from above synopsis the space was ample for the number employed.

The ventilation, too, was theoretically satisfactory, though means have still to be invented to meet all requirements. Some employees want the windows, etc., always shut, others want them always open, and a working compromise has to be secured which at least meets the standard of the Factories and Workshops' Act.

Several complaints have been made by the District Factory Inspector—two of nuisance, in connection with sanitary conveniences, and six of cases where no separate provision was made for the sexes. With one exception these cases have been investigated and remedied. The exception serves to illustrate some of the difficulties met with in enforcing the Act. For example, in a factory where considerably less than 20 persons are employed there are two closets, one for males and one for females. The

employer is asked to provide two additional closets, because the employees work on different floors in the same building. The employer objects because by the same reasoning if he had only 4 workpeople, two men and two women, he would require a closet for each person, whereas the Act only requires one closet for every 20 employed, separate provision of course being made for the sexes.

Another employer has his closets carefully marked "For men only" and "For women only," but the employees use them indifferently. Here the employer complies with the letter of the law, but the spirit of the law is broken, and there is no provision to compel compliance on the part of the persons employed.

Several other anomalies have arisen which cannot be decided by casuistry, and which the Health Committee have therefore treated with a mixture of common-sense and compromise.

Fire Escapes.—The Buildings and Streets Committee have been carrying out the inspection of all public buildings, more especially theatres, churches, halls, and factories, with special reference to means of escape in case of fire. This inspection is being proceeded with, and factories where necessary will be made to comply with the Act.

Bakehouses.—The Bakehouses on the register number 32, half the number being underground bakehouses. These have all been carefully inspected and found satisfactory. In one instance where a certificate of suitability was refused by the Health Committee the bakehouse was closed. It was found also that baking was being carried on in a wooden building in Park Wood Street. On inspection I found the premises, on sanitary grounds, to be totally unfit for the purpose. This was reported to the Health Committee, who duly ordered the building to be closed.

Home Work.—No instance of work being given out has come to the knowledge of the Health Department.

Schools.—During the year I have made a systematic inspection of all the Elementary Schools, and reported the sanitary condition of each to the Education Committee. Under these circumstances I need only say that the points raised in my report have been referred to a Sub-Committee for special consideration. With regard to the school conveniences I emphatically urged the introduction of water carriage (w.c. or automatically flushed latrines) and now that the Sanitary Authority is at the same

time the Education Authority there should be no delay in getting this desirable improvement carried out.

Both Measles and Whooping Cough were epidemic in the Junior Schools, necessitating the closing for several weeks of all the Infant Schools with the exception of Highfield. In some schools the infant classes became practically non-existent within a few days. In one I found 4 "babies" present instead of 18, in another 5 out of 26, and in a third 10 out of 61. Later in this report I show that 64 children died from measles, and 31 from whooping cough in the course of a few weeks. Of these 95 deaths 90 were under 5 years of age, and a large proportion caught infection in the "baby" classes. Seeing that these two complaints are infectious, before the true nature of the disease can be recognised, the exclusion from school of infected children is too late, whereas total closure of school is often resented as undue interference with education. Perhaps you will excuse a short quotation from the "British Medical Journal," bearing upon this subject:—"The health, habits, and happiness of every generation depend on the devotion and capacity of the mother more than on any other single thing. In spite of these obvious facts we deliberately encourage married women to earn money away from home and assist them to do so by maintaining infant schools at the expense of the community, a policy not only economically wasteful but ruinous to the children. We rob them of their mother, poor creature though she may be, and offer them a step-mother, trained, certificated, and accomplished in the special method of amusing young children, laboriously invented by a German pedant with the intention of imparting moral and intellectual ideas to children under 5 years of age. The intellectual fruits of this admirable system are not yet obvious, but the effect of it in spreading two of the greatest scourges of young children—measles and whooping cough—with their terrible mortality at that age are plain enough, and this with a birth-rate already declining, and certain to decline still further, represents a national loss we can ill afford." It may be objected that children between 3 and 5 years of age are better in school than running wild in the streets or tumbling over each other in crowded dwellings. In reply, we note that 90 children under 5 died in three months from infection contracted in school, whereas the older children were practically exempt. Even if the epidemic was exceptionally severe, our duty as a sanitary authority should rather be to prevent the overcrowding referred to and to provide open spaces where children may enjoy out of doors the fresh air and freedom which they cannot get in any school in the land, and where, if they must be taught, they could have lessons on nasal

breathing, health exercises, etc., to fit them for the indoor school life that is to follow. Now that the State has united in holy bonds the Sanitary and the Education Authority, let us not in our schools divorce the *sana mens* from the *sana corpora* of our children. I have no hesitation in saying that personally, and as your Medical Officer of Health, I should be satisfied if the first and only lesson learned by children during their first year of school life was the new commandment: "Thou shalt be clean, and shalt breathe through thy nostrils."

Fever Hospital.—During the past year 198 cases were admitted into Hospital, of whom 88 were from the Borough. So far as Keighley is concerned—in fact so far as the whole area under the Joint Board is concerned—this is the next to smallest number admitted during any whole year since the hospital was opened in 1897.

District.	1897	1898	1899	1900	1901	1902	1903	1904
Keighley Borough ...	57	164	267	210	237	91	73	88
Bingley ...	53	35	81	102	36	30	34	18
Oakworth ...	1	11	10	20	5	5	3	41
Haworth ...	3	19	11	13	18	4	44	21
Oxenhope ...	9	...	5	1	1	5	17	0
Keighley Rural ...	6	4	13	68	35	8	27	29
Outside Authorities	...	7	27	3	27	28	15	1
Total ...	129	240	414	417	359	171	213	198

At the beginning of the year there were under treatment:—Scarlet Fever, 48; Diphtheria, 0; Typhoid Fever, 2. During the year the admissions from the several districts were:—

District.	Scarlet Fever.	Diphtheria.	Typhoid Fever.	Small Pox.	Total.
Keighley ...	48	28	9	3	88
Bingley ...	11	3	3	1	18
Oakworth ...	40	...	1	...	41
Haworth ...	21	...	...	...	21
Oxenhope ...	...	...	...	...	0
Keighley Rural ...	27	...	2	...	29
"Outside" ...	1	...	...	...	1
Total ...	148	31	15	4	198

Of the 198 cases admitted 15 proved fatal ; namely, Scarlet Fever, 8 ; Diphtheria, 3 ; Typhoid Fever, 3 ; Small Pox, 1.

At the close of the year the cases under treatment were :—Scarlet Fever, 16 ; Diphtheria, 6 ; Typhoid Fever, 1 ; Small Pox, 2. There were also in quarantine for suspected Small Pox, a family of father, mother, and four children. Extra work as well as additional expense has arisen owing to the necessity for opening small wards for the reception of cases which were not anticipated when the Institution was opened. I mean cases such as Scarlet Fever complicated with Whooping Cough, Scarlet Fever with Diphtheria, Measles and German Measles simulating Scarlet Fever. To meet these requirements the Joint Board intend to erect a separate Diphtheria pavilion so as to have the present Isolation Block kept for its original purpose.

Methods of Dealing with Infection.—The usual routine of dealing with Infectious Diseases has been fully described in former Reports. Besides the ordinary means included under Notification, Isolation, Inspection, Disinfection, etc., there are additional precautions which have for their object, prevention rather than treatment. I have also referred to such measures as the Bye-Law prohibiting spitting in public places, and the list of lodgers supplied daily by managers of common lodging-houses. Consideration has also been given by the Health Committee to a proposal to appoint Female Sanitary Inspectors or Health Visitors whose special duty would be investigating and removing those causes which induce excessive Infant Mortality. Leaflets on the feeding and rearing of infants, and referred to later, are the outcome of the Committee's deliberations, and may help in furthering the interests we have in view. Another measure, and one which I believe is fully appreciated by all the Medical Practitioners in the district is the bacteriological examination of specimens carried out by the West Riding County Bacteriologist.

Nuisances.—For full details of the various nuisances brought to the notice of the Health Committee, and of the steps taken to abate or remove such nuisances, I refer you to the accompanying Retort of the Sanitary Inspector. In making my Report I have tried to avoid entering into details which are better given by your Inspectors, and therefore have referred only in general terms to those insanitary conditions most likely to effect the public health.

Vital Statistics

Births.—During the year there were registered 1,017 births. Of these 526 were males, and 491 females. Notwithstanding the fact that the population of the Borough is increasing this is the smallest number of births registered in any one year since the extension of the Borough nine years ago. At that time the population was increasing at the rate of over eight hundred a year, but now we are almost at a standstill.

On an estimated population for the middle of the year of 43,490, the birth-rate works out at 23·3 compared with 26·9, 26·5, and 23·7 for the three previous years. How steadily the birth-rate has been decreasing may be noted from the fact that during the ten years 1880—1889 the birth-rate averaged 30·4; while in the following decade 1890—1899 it was 28·9, and as stated it has now fallen to the unprecedentedly low rate of 23·3.

For England and Wales the rate was 27·9, for the 76 great towns—that is those with a population over 50,000 the rate was 29·1, and for the 142 smaller towns 27·5.

The illegitimate births numbered 47, or practically 4·6 per cent. of the whole.

Deaths.—The actual number of deaths registered in the Borough was 792. This total, however, must be corrected by the addition of certain deaths occurring outside the Borough of persons belonging to the town, as well as deducting the deaths of non-residents who were brought into the Borough for treatment at the Hospital and Infirmary.

For this purpose we add 8 deaths in the Fever hospital; 3 in Bradford or Leeds Hospital, and 12 in Menston Asylum, *i.e.*, 23. and deduct 41 deaths in Keighley Hospital and Union Infirmary of persons non-resident in the town. The corrected total is therefore 774, of whom 372 were males, and 402 females. The death-rate amounts to 17·7. The rates for the previous three years were returned as 17·0, 15·6, and 15·3. As previously stated the increased death-rate was largely due to the heavy mortality during the last quarter from Whooping Cough and Measles. For further comparison it may be noted that the death-rate for the whole country was 16·2, for the 76 large towns 17·2, and for the smaller towns 15·6.

Infant Mortality.—The number of children under one year of age who died during 1904 was in the proportion of 156 to every 1,000 children born. This may be stated in another form by saying although 1,017 children were born during the year, 159 infants died before seeing the first anniversary of their birth. The infant mortality for the whole country was 146 ; for the large towns 160, and for the smaller towns 154.

For several years I have been drawing special attention to the excessive loss of infant life in certain parts of the Borough, and I am again compelled to refer to the same subject. In last year's Report I stated that an infant born in the North West Ward had twice the chance of living to be twelve months old that it would have if residing in the Central Ward. This year I might make the comparison stronger, and say that the probability would have been three times as great seeing that the infant mortality in the North West Ward was 77, while in the Central it was 218, and in the West 216. In 1899 the infant mortality in the North West Ward was 75, in the Central it was 338.

The correctness of this statement is based upon actual results and corroborated by the investigations and experience of many years.

In former Reports I have reiterated the fact that all insanitary conditions are hostile to the rearing of healthy children and acknowledged that as a Sanitary Authority we were responsible, could it be shown that the serious loss of infant life in the Central Ward was due to such insanitary conditions as damp and overcrowded tenements, dirty and insufficient conveniences, and undrained and unpaved back yards. The record, however, of the past two or three years, shows that hundreds of houses in this Ward have each been supplied with proper water closets, back yards have been drained and paved, and in fact an unusual amount of sanitary work done in the attempt to improve the hygienic environment of the Central Ward. So far the high infant mortality continues, and consequently we are led to conclude that factors are at work which are only partially under the control of the Sanitary Authority. One naturally asks if your endeavours are supplemented by the hearty co-operation of the parents and house-holders generally. You have seriously considered the problem of establishing a municipal milk depôt for the supply of humanised milk for infants, as well as the advisability of appointing a Female Sanitary Inspector, whose chief duty it should be to educate mothers in the feeding and rearing of children, but all

such efforts are not likely to be crowned with success unless there is a sympathetic attempt on the part of the parents to grapple with the evils as found within their own homes.

At your request I have drawn up a few hints upon the feeding and rearing of children, and these are being distributed by the local Registrar among those parents most likely to be benefited by the information given. I am glad to say the leaflet mentioned has been discussed by the Medico-chirurgical Society, and has been approved by the members.

Although I have specially referred to the Central Ward, it does not follow that the other Wards are beyond reproach. In a subsequent table may be seen the figures for the various Wards in tabular form. It will readily be seen that great differences exist between the infant deaths in different wards, but why such differences should exist it is difficult to explain. Of course one does not expect to find as good results from the Central or the West Wards as from the North-West, but why should the Central be at such a disadvantage when compared with the East and North-East Wards?

Zymotic Deaths.—The seven principal Zymotic diseases—Small Pox, Measles, Scarlet Fever, Whooping Cough, Diphtheria, Fever, and Diarrhœa—were registered as the cause of 123 deaths. This is the largest number recorded since 1900, and much above the figures of the previous years, namely, 83 in 1901, 50 in 1902, and 30 in 1903. As usually happens, the largest number of deaths was due to measles—so frequently but erroneously regarded as one of the least serious of children's ailments. From the following list it may be seen that Measles accounted for more deaths than all the other Zymotics added together.

Details of the prevalence of the different Zymotic diseases will be found under the heading "Special Diseases."

The Zymotic death-rate was 2·82 compared with ·69, 1·1, 1·9, 3·4 2·7 in the previous five years. The rate for England and Wales was 1·94, for the 76 great towns 2·49, and for the 142 smaller towns 2·02.

The deaths from Zymotic diseases were distributed as follow :

				Cen'l	East	N.E.	N. W	W.	S.	Total
Small Pox ..	...	...	...	1	...	...	...	...	...	1
Measles ...	...	...	...	16	13	0	3	16	16	64
Scarlet Fever	...	...	...	...	...	2	2	...	...	4
Diphtheria and Croup	..	...	...	...	4	...	1	1	1	7
Whooping Cough ...	...	...	...	4	8	4	3	7	5	31
Fever ...	...	...	...	1	...	1	...	...	...	2
Diarrhœa ...	...	...	...	2	2	5	1	1	3	14
Total ...	...	...	...	24	27	12	10	25	25	123

Comparison of Zymotic death-rate with those of previous five years :—

				1899	1900	1901	1902	1903	1904
Small Pox ...	...	..	...	·00	·00	·00	·02	·00	·02
Measles ...	...	...	...	·02	1·00	·02	·87	·02	1·47
Scarlet Fever	...	...	...	·46	·64	·11	·04	·04	·08
Diphtheria and Croup	...	...	...	·22	1·15	·74	·07	·16	·16
Whooping Cough ...	...	...	...	·56	·02	·26	·00	·23	71
Fever ...	...	...	...	·32	·24	·23	·00	·09	·04
Diarrhœa ...	...	...	...	1·14	·36	·57	·16	·13	·32
Zymotic death-rate ...	...	...	...	2·72	3·43	1·96	1·16	·69	2·82

Deaths occurring in the Fever Hospital are of course allocated to the Wards from which the cases were removed.

One occasionally hears a statement to the effect that infectious diseases rarely invade the West Ward, more especially the Westgate area of the West Ward.

To ascertain if there be any ground for this statement I have calculated the Zymotic death-rates for the past five years in the several Wards, and find they tell a different tale. The following table gives details :—

Wards.	Estimated Population.	Total cases for 5 years.	Zymotic death rate for 5 years.
N.W.	8688	57	1·3
N.E.	6967	65	1·8
South	8016	74	1·8
East	7096	77	2·1
Central	5080	69	2·7
West	6344	87	2·7

Deaths at Different Age Periods.—Of the 774 deaths registered as belonging to the Borough, 159 died under 1 year of age, and an additional 134 between 1 and 5—or a total of 293 under 5 years of age. Following this “massacre of the innocents,” 32 persons died between the ages of 5 and 15—the chief cause of death being Tubercle. Between 15 and 25 there were 23 deaths—more than half being from Tubercular disease. Between 25 and 65 there were 261 deaths with Phthisis again as the principal cause. At ages over 65 there were 165 deaths.

Table showing Births, Birth-rates, Deaths, Death-rates, and Zymotic Deaths, etc., for the past 25 years :

Year.	Estimated Population.	Births.	Birth-rate.	Deaths.	Death-rate.	Zymotic Death-rate.	Infant Mortality.
1880	25,180	841	33·3	559	22·2	2·1	177
1881	25,333	792	31·2	608	24·0	2·5	183
1882	25,883	768	29·6	567	21·9	2·9	162
1883	26,404	724	27·4	536	20·3	1·4	172
1884	26,935	865	32·1	586	21·7	2·0	190
1885	27,477	781	28·4	560	20·3	1·9	177
1886	28,030	878	31·3	567	20·2	1·4	132
1887	28,594	914	31·9	666	23·3	3·4	174
1888	29,168	849	29·1	637	21·8	4·0	146
1889	29,756	878	29·5	602	20·2	1·9	163
1890	30,354	989	32·5	707	23·3	2·9	158
1891	30,965	970	31·3	664	21·4	2·1	165
1892	31,530	907	28·4	601	19·0	1·7	158
1893	32,070	922	28·7	616	19·2	2·2	158
1894	32,750	862	26·3	600	18·0	1·8	190
1895	33,202	899	27·0	639	18·4	1·1	177
1896	38,000	1156	28·4	695	17·7	1·5	163
1897	38,800	1128	29·0	662	17·0	1·6	139
1898	40,000	1195	29·8	739	18·4	2·2	171
1899	40,900	1127	27·5	790	19·3	2·7	170
1900	41,020	1066	26·0	875	21·3	3·4	164
1901	41,564	1120	26·9	707	17·0	1·9	142
1902	42,500	1129	26·5	667	15·6	1·1	155
1903	43,120	1023	23·7	663	15·3	·6	140
1904	43,490	1017	23·3	774	17·7	2·8	156

Table showing Birth-rates, Death-rates, and Infant Mortality in the several Wards :—

Wards.				Populati'n	Birth-rate	Death-rate	Infant Mortality,
Central...	...	...	...	5080	25·9	24·4	218
East	...	...	...	7300	23·9	17·2	131
N. East	...	...	...	7108	24·2	16·1	151
N. West	...	...	...	8970	18·6	13·3	77
West	...	...	...	6510	29·0	23·1	216
South	...	...	...	8202	22·1	16·8	148
Hospital & Workhouse				310	...	...	...
Borough				43490	23·3	17·7	156

As I have previously pointed out, this is a table of considerable interest, and shows at a glance—as far as statistics can show—the relative position held by the several wards.

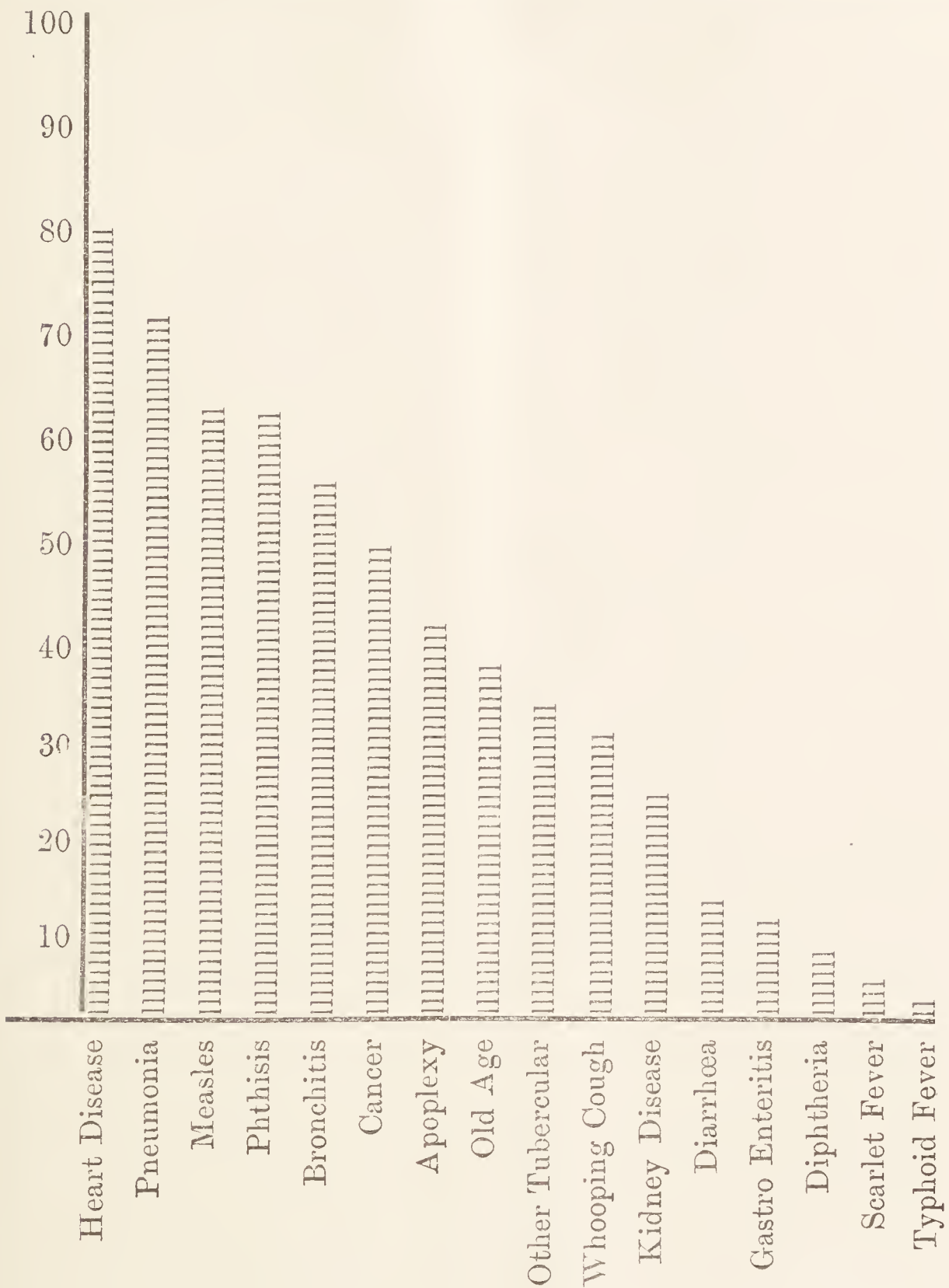
For instance, in the Central Ward we have a fairly high birth-rate, a very high death-rate, and as might be inferred, a very high infant mortality. In the East and North-East Wards we have a relatively high birth-rate combined with a satisfactory low death-rate. The North-West Ward shows a very low birth-rate as well as a very low death-rate and low infant mortality. The West Ward shows the other extreme, namely, the highest birth-rate together with very high death-rates. The South Ward maintains the average position it has held for some years with a comparatively low birth-rate associated with a low death-rate and low infant mortality. In describing the conditions existing in the various wards, I have used almost the identical expressions used in former Reports to describe the conditions then existing. I mention this in order to justify the criticisms now made, and to enhance their value by showing them to be based on the results of several years, and not simply on the statistics of the past twelve months.

Deaths in Public Institutions.—It is a matter of considerable interest to note that out of a gross total of 815 deaths registered in the Borough, or belonging thereto, no fewer than 132 died in public institutions. Of this total 41 were deaths of persons brought into the town for hospital treatment, but even then one is hardly prepared for the fact that every sixth death takes place in one or other of the medical institutions.

Uncertified Deaths.—There were 19 Coroner's inquests held during the year, of which 14 were in the case of accidents. The number of deaths registered without the cause of death being certified either by a medical man or by the Coroner were 25, or fully 3 per cent.

Still-born children are not taken into account in the above calculation. Last year 64 still-born children were interred in the Cemetery compared with 67 in the previous year.

Table showing in a diagrammatic form the diseases which have been registered as the causes of the greatest number of deaths during 1904 :—



Special Diseases.

Small Pox.—During the past year only three cases of Small Pox were notified. The first was that of a tramp staying in a common lodging house in the Central Ward. That the disease from which the man was suffering might be infectious, was not suspected till after midnight, but before two that morning he was safely housed in the Small Pox Hospital. The necessary precautions were taken to check the spread of infection, and as a result no one was any the worse except the patient, who some days later succumbed to the disease.

The story told by the man as to his whereabouts for the previous fortnight was a very tangled one, and no satisfactory clue could be got as to the source of infection. He had been in some of the Lancashire towns where Small Pox was known to be prevalent, but as usual with vagrants no reliance could be placed on the statements made.

The next case was that of a manager in a machine works. Here too the source of infection was doubtful, although there was a definite history of him visiting a suspected district, as well as of receiving visitors from the same neighbourhood. He was removed to the hospital from the North-West Ward. His house was carefully disinfected. A list of all "contacts," including neighbours and fellow-workpeople was made, vaccination was carried out when permitted, and supervision of all contacts was maintained until danger of infection was passed.

The third and last case occurred during the closing days of the year, and caused the health department a great amount of work as well as anxiety. The history of the case shows how the public health is endangered by the wilful carelessness of the vagrant classes. These pests roam about perfectly indifferent to the welfare of others. Should they unfortunately contract infection their first object seems to be concealment, and the next to keep moving about from place to place, leaving the seeds of disease behind them, and guided only by their own selfish wills. It seems in vain for Health Authorities to urge measures to restrict the unbounded freedom of the vagrant during epidemic times, and for a Medical Officer of Health to suggest the compulsory vaccination of a tramp would be considered "an impertinent interference with the liberty of the individual." To point my moral I cannot do better than give the details of the case in view.

On Monday, 26th December, a family consisting of father, mother, and five children left Barnsley and travelled by Midland through Leeds to Keighley. During the afternoon they visited several public-houses and spent the night at a common lodging house. Next morning they were turned out, the reason given being that one of the children had chicken pox. Tuesday and Wednesday were mostly spent in the streets and "pubs," the nights being passed at the house of a relative in Westgate. Thursday morning again found them in the street, where I had no difficulty in seeing that one child was suffering from well-marked Small Pox. All the family were at once removed to the hospital, where the sick child was put to bed and the others vaccinated and kept in quarantine. Within a few days it was evident that vaccination was performed too late to prevent two other children from developing the disease, but the remainder safely passed the period of incubation and were allowed their liberty. On admission the parents solemnly assured the authorities that they had just arrived from Barnsley, and the history just given had to be evolved step by step in face of a tissue of falsehoods. No ordinary case was necessary to trace and effectively disinfect the footsteps of this pestiferous party, and one can scarcely doubt but that some luckless passenger by the Midland will have reason to remember his Boxing-day fellow-travellers.

Measles.—Last year I drew your attention to the ebb and flow of certain epidemic diseases, and showed how striking an example of this periodicity we had in Measles. For instance, in 1898 there were 27 deaths from this cause in the Borough; in 1899 only 1; there were 42 in 1900 and in 1901 only 1; there were 37 in 1902, and in 1903 only 1. Consequently the inference was that we might expect a serious epidemic in 1904. How true this inference proved to be is shown by the death-returns. No fewer than 64 deaths from Measles were recorded during the last three months of the year. How many cases may have occurred it is impossible to say, but judging from the number of fatalities it is evident the epidemic was one of the worst visitations we have had for many years. With one exception every infant school had to be closed, but seeing that the infection is greatest before the rash comes out less benefit is derived from closure of schools than with other infectious diseases. Thwaites Brow Infant School was the first invaded and here within a few days of the primary case the attendance of infants under 5 years of age dropped from 26 to 5. Naturally one would say the school ought to be immediately closed, and yet among the children of six years and upwards there very few absent. Unfortunately the Education Department does not allow part of a school to be closed even though that part (for example the "baby" class) is proved to be a very hot house for breeding infection.

After invading Thwaites Brow the epidemic rapidly spread from school to school, and was only checked by the general closing for a prolonged holiday at Christmas. The North-East Ward alone did not contribute to the death-list. Three deaths occurred in the North-West Ward, 13 in the East, and 16 in each of the Central, West, and South Wards.

Of the 64 deaths registered 60 were children under 5 years of age—surely a strong indictment of the vicious habit of herding young children together in infant schools at an age when they are most liable to infection, and when their resisting powers are at the lowest ebb.

I have frequently pointed out how erroneous is the common idea that Measles is only a child's complaint not likely to be serious, and therefore not requiring any great attention. Last year Measles was the cause of more deaths than all the other Zymotic diseases added together, and what perhaps is more striking, the deaths from Measles exactly equals the total of all the deaths from Scarlet Fever within the Borough for the previous thirteen years.

Scarlet Fever.—This Zymotic was slightly more prevalent than during the previous two years, although the cases notified were below the average of the previous five years. Cases were reported from all the Wards, but mostly from the North-East and North-West Wards.

The following table gives details of the cases notified and the number removed to the Fever Hospital:—

	CASES NOTIFIED.							CASES REMOVED.						
	C.	E.	N.E.	N.W.	W.	S.	Total.	C.	E.	N.E.	N.W.	W.	S.	Total.
Jan ...	2	1	2	1	1	...	7	2	1	2	1	1	..	7
Feb. ...	...	...	...	1	...	..	1	...	...	...	1	...	...	1
March ..	..	...	2	..	5	1	8	...	...	2	...	5	1	8
April ...	...	1	...	..	...	...	1	..	..	..	..	...	...	...
May ..	...	...	1	...	...	...	1	...	...	1	..	...	...	1
June ...	...	...	1	1	1	1	4	...	...	1	...	1	1	3
July ...	1	1	2	..	...	...	4	1	1	2	...	...	...	4
August ..	...	...	...	...	...	2	2	...	...	...	...	...	1	1
Sept. ...	..	...	2	5	...	1	8	...	...	2	5	...	1	8
October ..	...	..	...	2	...	1	3	...	..	...	1	...	1	2
Nov. ...	2	3	5	...	2	1	13	2	1	4	...	1	1	9
Dec. ...	...	3	2	2	...	1	8	...	2	1	...	...	1	4
	5	9	17	12	9	8	60	5	5	15	8	8	7	48

As in former years, I also show in tabular form the degree to which infected households availed themselves of hospital isolation :

	Cases Notified.		Cases Removed.		Percentage Removed.	
Central	5	...	5	...	100	%
East... ..	9	...	5	...	55	
N. East	17	...	15	...	88	
N. West	12	...	8	...	66	
West	9	...	8	...	88	
South	8	...	7	...	87	
	60		48		80	

The percentage isolated in hospital is higher than in previous years. The 60 cases notified occurred in 49 houses, in 5 of which were insanitary conditions detected.

The death-rate from Scarlet Fever was .08 compared with .11, .04 and .04 in the previous three years.

Diphtheria and Membranous Croup.—Compared with 1903, there was a decided increase in the number of cases of Diphtheria notified. It cannot be said, however, that the disease was present in epidemic form. Seeing that 49 cases were recorded compared with 43, 216, 145, 44 and 15 in the previous five years. The Wards most affected were the East and North-East where, as in 1903, the Central and North-West Ward showed the greatest incidence. Below I give the notification and removals to hospital:

	CASES NOTIFIED.							CASES REMOVED.						
	C.	E.	N.E.	N.W.	W.	S.	Total.	C.	E.	N.E.	N.W.	W.	S.	Total.
Jan. ...	1	1	1	1	1	...	5	...	1	1	1	...	...	3
Feb. ...	...	1	1	...	1	...	3	...	...	...	...	1	...	1
March ...	1	...	...	...	1	...	2	1	...	...	...	...	...	1
April ...	...	...	2	...	...	...	2	...	...	2	...	...	...	2
May ...	1	...	1	2	...	...	4	...	...	1	1	...	1	3
June ...	1	1	1	...	2	3	8	1	1	...	...	2	2	6
July ...	...	2	...	...	1	1	4	...	1	...	...	1	1	3
Aug. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sep. ...	...	1	2	1	...	...	4	...	...	...	1	...	...	1
October ...	...	2	1	1	...	...	4	...	1	1	1	...	...	3
Nov ...	...	4	1	1	...	3	9	...	1	...	...	...	2	3
Dec. ...	...	...	2	1	...	1	4	...	...	1	...	...	...	1
	4	12	12	7	6	8	49	2	5	6	4	4	6	27

For the sake of comparison I give the per centage of cases isolated in hospital :—

	Cases Notified.	Cases Removed.	Percentage Isolated.
Central ...	4	2	50 %
East ...	12	5	41
N. East ...	12	6	50
N. West ...	7	4	57
West ...	6	4	66
South ...	8	6	75
	<hr/> 49 <hr/>	<hr/> 27 <hr/>	<hr/> 55 <hr/>

Why there should be so much a smaller proportion of Diphtheria patients removed to hospital than of Scarlet Fever cases I cannot say. It may be that parents are influenced by the fact that it is much harder to keep a child shut up in its bedroom for six weeks in Fever than for three weeks in Diphtheria. Hospital treatment for Diphtheria, as proved by experience, is however so much better than home treatment that one would expect the hospital would be more patronised for the sake of the patient apart altogether from the public good.

The 49 cases notified occurred in 45 different houses, in only 5 of which were defects in sanitation found. Insanitary surroundings could not therefore be given as a predisposing cause, and seeing that a large proportion were young children—39 out of 49—I am inclined to think that personal infection accounted for most of the cases.

The death-rate from Diphtheria was ·16 compared with ·47, ·07, and ·16 for the previous three years.

Whooping Cough.—I have formerly recorded that it was exceptional to find a serious epidemic of Measles and Whooping Cough running concurrently. The year just closed, however, was marked by a very heavy mortality from both diseases. How many cases of either occurred we can only infer from the fact that 31 deaths were registered as due to Whooping Cough. Of the 31 fatal cases 30 were children under five years of age. They were scattered all over the Borough, although probably the East Ward suffered most heavily.

There can be no doubt but that the aggregation of young children in infant schools contributed largely to the spread of infection.

The death-rate from this cause was $\cdot 71$ compared with $\cdot 26$, $\cdot 00$ and $\cdot 23$ for the previous three years.

Typhoid Fever.—The presence or otherwise of this disease in a town is frequently taken as the measure of its sanitary condition. For years I have persisted in drawing your attention to the much greater prevalence of Typhoid Fever among houses dependent upon the midden or tub-systems than among houses supplied with water carriage. It is very gratifying, therefore, to note that since the Health Committee began systematically to enforce the rule of one closet for each house, and that closet a water-closet, the number of cases of Typhoid Fever has steadily diminished. As stated in last year's report, I do not wish to push this argument beyond its logical conclusion. I am nevertheless convinced that the conversion of the tub-closets into water-closets is in the best interest of the town and its inhabitants. The steady decline in the number of cases of Typhoid Fever coincides so closely with this improvement in the condition of the sanitary conveniences that the Committee must feel justified in continuing their efforts to render this preventable disease less prevalent. The statement just made may be verified from the records of past years, and is not nullified by the strange fact that last year no case of Typhoid was registered in the West Ward although that Ward is supposed to contain more than its own share of tub closets. In this connection it is well to remember the sanitary improvements carried out in Westgate during the past three years. For economic reasons you were unable to declare Westgate an insanitary area, and therefore individual houses had to be treated according to their requirements. In this way rows of tub closets were demolished and automatically flushed latrines were built in their place, houses have been connected with the sewers, back yards have been paved, and those dwellings too delapidated to repair have been permanently closed.

The following table shows the seasonal distribution of the cases in the several wards, and the numbers removed to the hospital :—

CASES NOTIFIED.								CASES REMOVED.							
	C.	E.	N.E.	N.W.	W.	S.	Total.	C.	E.	N.E.	N.W.	W.	S.	Total.	
Jan. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Feb. ...	1	...	...	2	...	...	3	...	...	...	2	...	...	2
March	...	...	...	...	...	...	...	...	...	...	...	...	...	...
April ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
May ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June ...	...	...	...	...	...	1	1	...	...	...	...	...	1	1
July ...	...	...	...	1	...	...	1	...	...	...	...	...	...	...
August	...	...	1	...	...	...	1	...	...	1	...	...	...	1
Sep. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October	1	...	...	...	...	...	1	1	...	...	...	...	...	1
Nov. ...	1	1	1	...	...	...	3	1	1	1	...	...	...	3
Dec. ...	...	1	...	...	...	...	1	...	1	...	...	...	...	1
	3	2	2	3	...	1	11	2	2	2	2	...	1	9	

It will thus be seen that only 11 cases were notified of which 9, that is 82 per cent. were treated in hospital. For comparison it may be mentioned that 56, 57, 33, 23, 21 cases were notified during the previous five years. Eight of the 11 infected houses had tub closets.

There were two deaths registered, one among the 9 treated in hospital, and one of the two treated at home. The death-rate is .04 compared with .23, .00 and .09 in the previous three years.

Diarrhœa.—The number of deaths from this cause was considerably in excess of that registered during the two previous years, but still below the average of former years. I have so frequently referred in previous reports to the evils resulting from careless dieting, dampness, decomposing filth, and dirty conveniences that further remarks upon their influence in inducing Diarrhœa in children should be unnecessary.

There were 5 deaths out of a total of 14 registered from the North-East Ward, and 13 out of the total were children under five years of age.

The death-rate was .32 compared with .57, .16 and .13 for the previous three years.

Respiratory Diseases.—The deaths under this heading numbered 127 and comprises Bronchitis 55, Pneumonia and

Broncho-Pneumonia 77, and Pleurisy 1. Half the total occurred among children under 5 years of age. It can hardly be urged I think that the heavy mortality is the direct result of insanitary surroundings, and yet three times as many deaths occurred in the West Ward as in the North-West.

The death-rate from this class of disease was 2·92 compared with 2·9, 2·2 and 3·2 in the previous three years.

Diseases of the Respiratory Organs other than those just mentioned caused 7 deaths, compared with 6 and 22 in the previous years.

Phthisis.—This, the most serious as well as the most subtle of infectious diseases was registered as the cause of 62 deaths. This is practically the average for the past four years, but less than the average of former years. To show the gradual decline in the death-rate from Phthisis I give the average rates for each period of 5 years since 1881.

From 1881—1885	...	...	death-rate =	2·4
„ 1886—1890	...	...	„ „	2·1
„ 1891—1895	...	...	„ „	1·7
„ 1896—1900	...	...	„ „	1·6
„ 1901—1904	...	...	„ „	1·4

Much, however, has still to be done by Health Authorities before they can rest from their labours. It should not be necessary to repeat year after year that Tuberculosis is an infectious disease, the germs of which flourish in dark and badly ventilated dwellings, but are killed by fresh air and sunlight. As I have formerly pointed out we must aim at counteracting the conditions which favour the growth of the infectious germs, and as a Sanitary Authority we must remember that success in this matter depends largely upon how we attack the mischief at its fountain head. Koch, the great German Bacteriologist, has stated in no uncertain way the source:—“It is the overcrowded dwellings of the poor that we have to regard as the real breeding places of Tuberculosis.” With such a wide field of operation before us, we must not rest satisfied with trying to control the spread of Tuberculas germs by simply making bye-laws prohibiting spitting in tram cars and public places generally. Leaflets have been sent to every workshop and factory pointing out the danger arising from Tuberculous Sputum, and if workpeople take a firm stand against promiscuous spitting while at work I am sure the Health Committee will continue their eadeavours to secure healthier workshops as well as healthier homes.

The death-rate from Phthisis was 1·37, while from Tubercular diseases other than Phthisis it was ·78.

Cancer.—The deaths registered under this heading are considerably greater than for some years. With the exception of East and North-West Wards the increase appears in all the other Wards. In former reports I have referred to the much greater incidence of malignant disease in the North-West Ward than elsewhere, but during 1904 the South Ward was notorious in this respect.

The death-rate from Cancer was 1·10 compared with 1·02 in 1901, ·87 in 1902, and ·76 in 1903.

Notification of Infectious Diseases.—As may be seen from the following table the number of Notifications is, with one exception, the smallest recorded :—

	Small Pox.	Scarlet Fever.	Diphth- eria and Croup.	Erysip- elas.	Typhoid Fever.	Puerper- al Fever.	Total.
1890	...	427	63	45	72	4	611
1891	...	92	36	43	38	2	216
1892	8	131	38	38	83	6	304
1893	72	68	44	43	33	8	268
1894	1	57	26	44	33	6	167
1895	...	54	18	45	46	4	167
1896	2	13	17	55	60	6	153
1897	...	49	13	40	62	4	168
1898	...	72	148	41	73	2	336
1899	...	369	43	74	56	8	550
1900	...	311	216	69	57	4	657
1901	...	260	145	29	33	2	469
1902	31	52	44	36	23	3	189
1903	25	43	15	36	21	3	143
1904	3	60	49	28	11	1	152

Further particulars as to ages, etc., of the cases will be found in the Local Government Board Table IV., page 34.

Year.	Popula- tion estimated to Middle of each Year.	Births.		Deaths under One Year of Age.		Deaths at all Ages. Total.		Total Deaths in Public Institu- tions in the District	Deaths of Non- Residents registered in Public Institu- tions in the District	Deaths of Residents registered in Public Institu- tions beyond the District	Deaths at all Ages. Nett.	
		Number	Rate*	Number	Rate per 1000 Births registered	Number	Rate.				Number	Rate*
1	2	3	4	5	6	7	8	9	10	11	12	13
1894	32750	863	26.3	164	190	600	18.3	59	6	13	607	18.5
1895	33202	899	27.0	160	177	639	19.5	72	25	9	623	19.0
1896	38000	1156	28.4	189	163	695	18.2	79	21	6	680	17.8
1897	38800	1128	29.0	157	139	662	17.0	93	13	11	660	17.0
1898	40000	1195	29.8	205	171	739	18.4	107	27	27	739	18.4
1899	40900	1127	27.5	192	170	797	19.4	123	39	32	790	19.3
1900	41250	1066	25.6	175	164	869	21.0	130	28	34	875	21.2
1901	41800	1120	26.6	159	142	699	16.7	99	16	24	707	16.9
1902	42500	1129	26.5	175	155	684	16.0	69	24	7	667	15.6
1903	43120	1023	23.7	144	140	686	15.4	112	29	6	663	15.3
Averages of years 1894-1903	39232	1070	27.0	172	161	707	18.0	94	22	16	701	17.9
1904	43490	1017	23.3	159	156	792	18.2	132	41	23	774	17.7

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

NOTE.—The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10, and the addition of the number in column 11.

By the term “Non-residents” is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term “Residents” is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The “Public Institutions” taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, namely, District Hospital, and Workhouse Infirmary within the district, and Keighley and Bingley Fever Hospital and Menston Asylum outside the district.

Area of District in acres 3,600

Total population at all ages, 41,564; Number of Inhabited Houses, 9,229; Average Number of Persons per House, 4.503 (at Census of 1901).

L.G.B. Table II. KEIGHLEY BOROUGH.

Names of Localities.	CENTRAL WARD.				EAST WARD.				NORTH-EAST WARD.				NORTH-WEST WARD.				WEST WARD.				SOUTH WARD.			
	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.
1894	4130	84	66	24	5360	167	103	37	5250	132	75	20	5760	117	90	20	5700	182	103	30	6370	180	110	29
1895	4130	88	61	15	5380	159	98	29	5320	158	93	30	5835	123	83	11	5822	185	109	40	6485	186	120	31
1896	5640	147	103	27	6580	259	129	36	6290	181	75	25	6860	168	89	26	6160	218	108	41	6230	183	112	33
1897	5500	156	90	22	6500	197	86	22	6350	177	88	23	6800	162	89	14	6450	226	111	42	7200	210	105	27
1898	5500	173	103	34	6620	259	107	33	6580	179	96	32	7210	159	105	18	6430	212	88	40	7420	213	133	44
1899	5350	112	100	38	6720	235	119	41	6780	180	112	30	7600	173	103	13	6600	219	110	30	7600	208	130	35
1900	5060	133	114	25	6785	201	139	39	6710	179	118	31	8335	164	116	17	6175	196	127	30	7830	193	125	26
1901	5080	126	105	27	6990	216	105	24	6777	196	111	36	8542	170	120	16	6216	213	130	25	7878	209	136	31
1902	5080	110	98	23	7096	203	104	28	6966	209	91	29	8688	199	106	23	6344	194	135	37	8016	214	133	35
1903	5080	101	83	22	7215	195	97	22	7025	194	116	26	8854	154	106	16	6461	196	151	32	8165	183	110	26
Averages of Years 1894—1903	5055	123	92	25	6524	209	108	31	6404	178	97	28	7448	159	100	17	6235	204	117	34	7319	208	121	31
1904	5080	132	124	29	7300	175	126	23	7108	172	115	26	8970	167	120	13	6510	189	151	41	8202	182	138	27

(a)---Deaths of residents occurring in public institutions beyond the district are included in sub-columns c of this table, and those of non-residents registered in public institutions in the district excluded. See note on Table 1, as to meaning of terms "resident" and "non-resident."
 (b)---Deaths of residents occurring in public institutions, whether within or without the district, are allotted to the respective localities according to the addresses of the deceased.

L.G.B. Table III. BOROUGH OF KEIGHLEY.
Cases of Infectious Disease notified during the Year 1904.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.						TOTAL CASES NOTIFIED IN EACH WARD.						No. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.								
	At all Ages	AT AGES—YEARS.						Central.	East.	North-East.	North-West.	West.	South.	Total.	Central.	East.	North-East.	North-West.	West.	South.	Total.
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards														
Small Pox ..	3	..	1	..	..	2	..	1	..	..	1	1	..	3	1	..	..	1	1	..	3
Cholera ..	49	1	18	20	5	5	..	4	12	12	7	6	8	49	2	5	6	4	4	6	27
Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Membranous Croup ..	28	..	..	3	2	23	..	1	4	5	5	8	5	28	..	..	..	..	..	..	..
Erysipelas ..	60	..	13	43	2	2	..	5	9	17	12	9	8	60	5	5	15	8	8	7	48
Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhus Fever ..	..	..	..	4	2	5	..	3	2	2	3	..	1	11	2	2	2	2	..	1	9
Enteric Fever ..	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever ..	..	..	..	..	..	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..
Puerperal Fever ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	152	1	32	70	11	38	..	15	27	36	28	24	22	152	10	12	23	15	13	14	87

L.G.B. Table IV.

BOROUGH OF KEIGHLEY.

CAUSES OF, AND AGES AT DEATH DURING YEAR, 1904.

CAUSES OF DEATH.	DEATHS IN WHOLE DISTRICT AT SUBJOINED AGES.							DEATHS IN WARDS (AT ALL AGES).						Un-certified.	Deaths in Public Institutions.	Deaths of Non-Residents.
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Central.	East.	North-East.	North-West.	West.	South.			
Small Pox	1	..	..	..	..	1	..	1	..	..	..	..	..	..	1	..
Measles	64	14	46	4	..	..	..	16	13	..	3	16	16	1	2	..
Scarlet Fever	4	..	2	2	..	..	..	..	..	2	2	..	..	..	4	..
Whooping Cough	31	15	15	1	..	..	..	4	8	4	3	7	5	..	1	1
Diphtheria and Membranous Croup	7	..	4	3	..	..	..	..	4	..	1	1	1	..	2	..
Croup	2	..	2	..	..	..	..	..	1	1	..	..	..	..	..	..
Fever { Typhus .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric	2	..	..	..	..	2	..	1	..	1	..	..	..	..	1	..
Other Continued .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Epidemic Influenza	1	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..
Cholera .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa (Cholera nostras and Zymotic enteritis)	14	9	4	..	..	1	..	2	2	5	1	1	3	..	..	..
Enteritis (Gastro-enteritis and Gastric catarrh)	11	5	1	1	..	3	1	..	2	3	1	2	3	..	..	..
Puerperal Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Septic Diseases .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Phthisis	62	2	3	2	10	43	2	8	10	7	14	15	8	1	12	3
Other Tubercular Diseases	34	11	8	7	4	4	..	6	..	6	6	9	7	..	6	1
Cancer, Malignant Disease	48	..	..	..	..	31	17	6	3	6	9	10	14	..	15	5
Bronchitis	55	16	6	..	..	14	19	9	9	9	3	21	4	1	3	..
Pneumonia	71	17	25	1	..	21	7	11	9	12	9	14	16	..	8	2
Pleurisy	1	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..
Other Diseases of Respiratory Organs	7	1	1	..	..	2	3	1	..	3	1	1	1	..	1	..
Alcoholism (Cirrhosis of Liver)	3	..	..	..	..	3	..	..	..	..	..	1	2	..	..	..
Venereal Diseases	2	..	..	..	..	2	..	..	..	1	..	..	1	..	1	..
Premature Birth	23	23	..	..	..	..	..	3	7	4	1	3	5	1	1	..
Diseases and Accidents of Parturition	7	..	..	..	..	7	..	..	2	1	2	..	2	..	1	..
Heart Diseases	80	3	1	3	2	38	33	9	19	13	12	11	16	12	11	4
Accidents	15	..	3	..	1	9	2	5	1	5	3	1	..	..	4	3
Suicides	3	..	..	..	..	3	..	..	1	1	1	..	..	..	1	..
Apoplexy	41	..	..	..	..	16	25	9	5	7	7	5	8	..	11	6
Kidney Disease	23	..	..	2	..	19	2	6	1	3	6	2	6	..	6	9
Old Age	38	..	..	..	..	..	38	5	10	3	8	8	4	1	16	2
All other causes	124	43	13	6	6	41	15	23	19	17	26	23	16	8	24	5
All causes	774	159	134	32	23	261	165	124	126	115	120	151	138	25	132	41

NOTES.—(a) The Deaths of Residents occurring beyond the limits of the District are included in this Table, and Deaths of Non-Residents occurring in the District are excluded.

(b) Deaths of Residents occurring in Public Institutions are allotted to the respective localities according to the addresses of the deceased as given by the Registrars. and in addition classified under "Public Institutions."

Meteorology.—I am indebted to Mr. Croft, *News Office*, for the following figures and remarks on the climatic condition of the past year. Observations are taken at two places within the Borough, namely, the Knowle, 385 feet above sea level, and Thwaites Brow, about 700 feet above sea level. The other two stations mentioned, Filter-beds and Water Sheddles, are respectively 1,008 and 1,115 feet above sea level :—

	The Knowle, Keighley.	Ivy Cottage, Long Lee.	Filter-beds, Oldfield.	Water Sheddles Reservoir.
January	3·87in. ...	3·147in. ...	4·12in....	5·35in.
February.....	3·65 ...	3·370 ...	4·45 ...	6·10
March	2·26 ...	1·911 ...	2·35 ...	2·60
April	2·49 ...	2·191 ...	3·66 ...	2·64
May.....	3·16 ...	2·804 ...	2·73 ...	2·91
June	2·21 ...	1·926 ...	2·27 ...	2·16
July.....	1·91 ...	1·812 ...	2·68 ...	2·99
August	4·30 ...	3·608 ...	4·86 ...	6·16
September	1·03 ...	·800 ...	·87 ...	1·03
October	1·13 ...	1·044 ...	2·00 ...	2·96
November	2·99 ...	3·337 ...	3·88 ...	4·62
December	2·59 ...	2·287 ...	3·77 ...	4·04
Totals... ..	31·59	28·240	37·64	46·36

The following table shows the rainfall at the Knowle, Keighley, for the year 1904, with the fall for the corresponding months of the year 1903, and the average rainfall during the nineteen years during which observations have been taken :—

	1904.	1903.	Average for 19 years.
January.....	3·87in. ...	3·70in. ...	3·76in.
February	3·65 ...	4·57 ...	2·83
March	2·26 ...	5·37 ...	2·79
April	2·49 ...	1·70 ...	2·23
May	3·16 ...	2·86 ...	2·27
June	2·21 ...	1·52 ...	2·39
July ..	1·91 ...	4·85 ...	3·04
August	4·30 ...	4·84 ...	3·30
September.....	1·03 ...	4·92 ...	3·02
October	1·13 ...	10·63 ...	4·61
November.....	2·99 ...	2·33 ...	3·18
December	2·59 ...	2·46 ...	3·96
Totals.....	31·59	49·75	37·38

It will be seen from the above tables that the rainfall for the year 1904 was considerably below the average, and enormously below the record high fall for the year 1903. The number of days in the year on which not less than .01in. of rain fell at Keighley has been 211, and at Long Lee 219.

WILLIAM SCATTERTY,

Medical Officer of Health.

February, 1905.

REPORT

OF THE

VETERINARY INSPECTOR.

*To the Chairman of the Health Committee,
Keighley Town Council.*

DEAR SIR,

I have pleasure in laying before your Committee the Report of my Inspection of the Cowsheds and the Cattle kept within the Borough during the past year, more especially as the general health of the Cattle has been highly satisfactory. There has been a diminution in the number of udder affections, and the absence of any epidemic disease amongst the herds has again been a marked feature of the year.

I have had occasion since my last Annual Report to give instructions for the immediate removal of two Cows from amongst the Milking Cattle at two separate farms; in one instance in consequence of the Cow suffering from general tubercular disease, where the mammary gland was also invaded; this cow had only recently been purchased. And in the other instance, where the Cow was suffering from septic pneumonia following parturition and retention of the foetal membranes. In each case my request was speedily complied with, and the animals were consigned to the knacker's yard.

I feel, however, that I cannot let this opportunity pass without again making reference to desired improvements in the conditions and surroundings under which milk is produced and supplied to the public; although I feel it incumbent upon me to say that Keighley will bear favourable comparison with any other district in the West Riding in this respect.

Apart from the practically universal use of milk in ordinary diet, when we consider that milk is especially the diet of a large

number of infants under one year old, and also of invalids, in which cases the natural protective forces of the body are weak; and that while its power for good, if pure, is great, its power for evil, if impure, is equally great, it is difficult to exaggerate the importance of a pure supply; and not only from these general considerations are we disposed to strive for a pure milk supply; but from evidence in other districts, it has been proved that infected milk has been responsible for many serious outbreaks of disease, among the more important being Typhoid, Diphtheria, Scarlatina, Epidemic Sore Throat, Diarrhoea, and not least, Tuberculosis.

I do not intend, on this occasion, to amplify upon the conditions under which these particular diseases are promulgated through milk distribution, but more especially to confine myself to the cleanliness and care that should at all times be exercised by those who have the charge and manipulation of the Milking Cows and their product, milk. The importance of commencing the control of milk at the beginning can scarcely be over-estimated; the greatest possible care and cleanliness should be observed in all details connected with the process of milking. The hind quarters, tail, and udder of the Cow should be cleaned by the application of a soft brush, and the hands of the milker thoroughly cleansed with soap and water, and dried before milking takes place. A clean, washable overall should be worn by the milker invariably during the process. It may seem almost unnecessary for me to make these recommendations; but simple as they are, and obvious as the benefits to be derived from their adoption may be, it is only in very isolated instances that such preliminary caution is exercised; and it is by constantly keeping the desirability of such methods being practiced under notice and discussion, that I hope to influence the milk producers to adopt such measures.

The Cowsheds throughout the Borough have been greatly improved by the carrying out of the regulations contained in "The Dairies, Cowsheds, and Milk Shops Orders of '85, '86, and '89." The air space in the sheds has been brought up to the regulation capacity; the lighting of same and the paving of the floors has been vastly improved; the water supply, both for drinking purposes for the Cattle and the washing of the utensils, has been investigated and found to be generally satisfactory, and where deficient, amendment has been made, and it now rests with the milk producers to second the efforts of this committee and its officers, by adopting every means in their power to secure cleanliness and non-contamination of the milk during its production, transit, and delivery.

GEO. W. CARTER, F.R.C.V.S.,
Veterinary Inspector.

BOROUGH OF KEIGHLEY.



Sanitary Inspector's Report

For the Year Ending 31st December, 1904.



TO THE WORSHIPFUL THE MAYOR,
AND TO THE CHAIRMAN AND MEMBERS OF THE
HEALTH COMMITTEE.



GENTLEMEN,

I have pleasure in presenting to you my Fourteenth Annual Report, which shows, as far as possible in tabular form, the work accomplished or taken in hand by the Health Department during the year ending December 31st, 1904.

Infectious Disease Notification and Prevention Acts.
—The following table shews the number of cases of Infectious Diseases reported during the year, and for comparison the number of cases reported each year since the Notification Act came into operation. The population for each year is also given, and also the rate of illness from Notifiable Infectious Diseases per 1,000 of population for each year.

TABLE I.

NAME OF DISEASE.	NUMBER OF CASES REPORTED EACH YEAR.														
	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
Scarlet Fever	427	93	131	68	57	54	13	49	72	369	311	260	52	43	60
Typhoid Fever	72	38	80	33	32	46	57	60	73	56	57	33	23	21	11
Diphtheria and Membranous Croup	63	37	38	44	26	18	17	13	148	43	216	145	44	15	49
Erysipelas	45	45	38	43	44	45	55	40	41	74	69	29	36	36	28
Puerperal Fever	4	2	6	8	6	4	6	4	2	8	4	2	3	3	1
Continued Fever	..	1	3	..	1	..	3	2	..	..	..	..	..	..	..
Small Pox	..	..	8	72	1	..	2	..	..	..	..	..	31	25	3
Cholera	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..
Total No. of Infectious Cases.	611	216	304	270	167	167	153	168	336	550	657	469	189	143	152
Population for each year.	30354	30965	31530	32070	32750	33202	38000	38000	40000	40900	41250	41800	42500	43120	43490
Rate of Infectious Illness } per 1,000 of Population, }	20.13	6.97	9.64	8.42	5.10	5.03	4.03	4.42	8.40	13.45	15.93	11.22	4.45	3.32	3.49

The following list shews the number of houses in which cases of Infectious Illness occurred during the past year :—

TABLE 2.

NAME OF DISEASE.	No. OF CASES.	No. OF HOUSES.
Small Pox	3	3
Scarlet Fever	60	49
Typhoid Fever	11	11
Diphtheria and Membranous Croup..	49	45
Puerperal Fever	1	1
Erysipelas	28	26
Totals	152	135

The following list shews the number of cases of Infectious Diseases reported in each Ward, and the number of cases sent from each Ward of the Borough into the Keighley and Bingley Joint Hospital :—

TABLE 3.

NAME OF DISEASE.	No. of Cases Reported.							No. of Cases removed to Hospital.						
	Wards.						Totals	Wards.						Totals
	C	E	NE	NW	W	S		C	E	NE	NW	W	S	
Small Pox ..	1	..	..	1	1	..	3	1	..	..	1	1	..	3
Diphtheria and M'mbr'nus Croup }	4	12	12	7	6	8	49	2	5	6	4	4	6	27
Scarlet Fever ..	5	9	17	12	9	8	60	5	5	15	8	8	7	48
Typhoid Fever ..	3	2	2	3	..	1	11	2	2	2	2	..	1	9
Erysipelas ..	1	4	5	5	8	5	28	No provision made for treating these cases.						
Puerperal Fever ..	1	..	..	..	..	..	1							
Totals ..	15	27	36	28	24	22	152	10	12	23	15	13	14	87

The following list shews the cost to the Borough of the Infectious Diseases Hospital for each year since the Hospital Board's formation, together with the cost of maintenance of patients, the notification of Infectious Disease, and the cost of disinfection after such cases. The return also shews the effect of this expenditure upon the General District Rate for each year :—

TABLE 4.

Year ending 30th June.	Notification and Disinfection.	Hospital Precepts and Maintenance of Patients.	Total Cost.	Rate of 1d. in the £ produced.	Rate required to meet this Expenditure.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
*1892	16 13 0	3 13 10	20 6 10	340 0 0	0·06 pence
*1893	68 13 7	545 6 0	613 19 7	345 0 0	1·78 „
*1894	70 16 6	173 16 10	244 13 4	349 0 0	0·70 „
*1895	27 11 4	1196 5 0	1223 16 4	354 3 2	3·45 „
*1896	51 12 10	747 18 1	799 10 11	360 0 0	2·22 „
1897	47 1 3	1796 14 8	1843 15 11	371 0 0	4·97 „
1898	67 13 6	2051 8 7	2119 2 1	412 12 9	5·13 „
1899	76 0 4	2824 12 4	2900 12 8	435 1 2	6·67 „
1900	107 16 8	2725 10 6	2833 7 2	445 17 6	6·36 „
1901	110 8 6	2391 3 10	2501 12 4	453 10 0	5·52 „
1902	58 2 1	2469 17 9	2527 19 10	471 3 3	5·36 „
1903	97 7 5	2238 7 0	2335 14 5	496 7 7	4·70 „
1904	34 17 7	2033 4 1	2068 1 8	502 4 0	4·12 „

*No Hospital accommodation.

The number of cases of Infectious Diseases reported (Table 1) bears satisfactory comparison with the number of such cases reported in any previous year, as, although in some respects the record created in 1903 is not maintained, there is nevertheless a measure of satisfaction to be derived from a perusal of the figures given. It will be seen that every year since 1898 there has been a steady decline in the number of cases of Enteric, Typhoid, Relapsing and Continued Fevers reported, and that in the past year, with only 11 such cases out of a population of 43,490, or an Enteric illness rate of 0·253 per 1000 of population, a record for the Borough has been created which we shall probably find it difficult to beat in any one year, and impossible to maintain for a longer period. Investigation of these 11 cases failed to produce any conclusive evidence as to the source of infection, although it is probable that two of the patients—one a visitor, and one a person in daily employment in a neighbouring town—did not contract the illness here. All the cases occurred in different houses widely apart, and with no traceable connection one with the other. All the houses had the town's water supply. The milk supply was in

each instance from a different source, and none of the cases were attributable to the consumption of shell fish. All the houses were found to be properly drained; two of them had water-closet accommodation; one had a waste water-closet, and eight had pail closets. Excluding the two cases first mentioned, the occupations of the remaining nine patients were:—1 painter, 1 carter, 1 mechanic, 1 mill hand, 1 confectioner, and 4 scholars. There was a suspicion of a common source of infection in two of the last-mentioned cases, as the children both attended the same school, and the cases were reported within a month of each other. At the school in question the drains were all in good order, and the water supply was from the Corporation mains; but the closet accommodation is upon the pail system. Both your Medical Officer and I have in past years advocated the conversion of these and other school conveniences into water closets.

Scarlet Fever and Diphtheria were responsible for an increased number of cases compared with the preceding year, but the number of such cases was below the average for the last five years.

Small-pox was prevalent in neighbouring towns throughout the year, but fortunately we contracted three cases only. Our first case occurred at a Common Lodging House in July; the second (December 7th) was a resident whose business (Mechanical Engineer) necessitated visits to other towns where the disease was prevalent, and the last case was a member of a family of seven who came into the town "on tramp." This family reported to your Medical Officer on the 30th December that they had that day come by train from Pontefract, and had been refused admission into a Common Lodging House because one of the children was believed to be suffering from Chicken-pox. The doctor immediately removed the patient to the Small-pox Hospital, and placed the rest of the family in quarantine, and thanks to your Committee's wisdom in requiring all keepers of Common Lodging Houses to report daily the names, age, and calling of every person resorting to such houses during the preceding night, we were able to find that this family had spent the night of the 26th December at a Common Lodging House in the Borough, and from there I was able to trace them to the house of a relative of theirs in Westgate, where it was found they had stayed from the 27th to 30th December. Thus we were able to place a large number of contacts under observation and to secure disinfection of the two houses. Fortunately only one of the numerous contacts with this family subsequently developed the illness (11th January) and this case being promptly removed and the premises again disinfected, there was no further spread of the disease.

In all cases of infectious disease it is our practice to visit the infected house forthwith upon receipt of notification of the illness,

the visiting Inspector taking with him for service upon the person in charge of the patient,—in case the patient is to be isolated at home,—a copy of the Notification certificate, upon which is also concisely set forth the penalties prescribed by the Statute in case of exposure of the infected person or of infected clothing, etc.; and a printed circular of instructions as to the isolation of the patient, and the use of disinfectants is also served. Removal of the patient to hospital is of course invariably advised, and every possible effort to trace the source of infection is made. The drainage and sanitary arrangements of the house are examined and should any defect be discovered steps are taken to have the same remedied. Immediate notice is also given to the managers of any school attended by children from an infected house, advising that the said children be excluded from school until receipt of a certificate from the Medical Officer of Health stating that the house is free from infection. 81 such notices and certificates were given last year. Thorough disinfection of all infected rooms, and in some cases of the whole house has been performed by generating Formic-Aldehyde gas in “Alformant” lamps, and in all cases of Small-pox, gaseous disinfection has been preceded by a thorough spray disinfection of the whole house with the same disinfectant in liquid form. In addition to this, in all cases where considered advisable, infected bedding has been either destroyed or removed for steam disinfection at the hospital.

Disinfection has also in several instances been performed for consumption and for cancer.

It may here be stated that as a result of the inspection of the drains of the 152 houses in which cases of infectious disease were reported defects more or less serious were discovered at 10 of the houses only, or in 6·57 per cent of the houses.

A street and ward list of Infectious disease reported, and also a list shewing the number of rooms disinfected and visits paid to infected houses by my two assistants, are printed as an appendix to this report.

NUISANCES.

The following list records the work accomplished under this heading during the year, and also shews the varied character of the matters dealt with :—

Nuisances left on books on December 31st, 1903	..	..	469
„ reported during 1904	..	..	714
Total number of nuisances dealt with	..	..	<u>1183</u>
Number of nuisances abated	..	..	689
Matters remaining on Register unabated or in course of abatement	..	..	494
			<u>1183</u>

COMPLETED MATTERS.

Defective and untrapped drains, trapped and relaid	..	..	202
Houses without proper slopsinks and drains connected to main sewers	..	..	8
Blocked gullies and drains, trapped, opened, cleansed, and repaired	..	..	57
Street gully drains, trapped, opened, cleansed or repaired	..	..	72
Waste-pipes cleansed and repaired	..	..	6
Blocked or defective water closet drains, opened, cleansed and repaired	..	..	50
Blocked or defective waste water closet drains, opened, cleansed and repaired	..	..	24
Blocked or defective trough closet drains, opened, cleansed and repaired	..	..	19
Dilapidated W.C. basins, cisterns, and pedestals, repaired and renewed	..	..	22
Houses supplied with sufficient water closets and ash-places in substitution for foul and insufficient midden privies	..	35	126
Houses supplied with sufficient water closets and ash-places in substitution for insufficient pail closet and ash-pit accommodation.	..	79	
Houses supplied with pail closet accommodation in substitution for insufficient midden privies	..	12	
Pail closets converted to water closets	..	..	8
Midden privies converted to water closets	..	..	10
Trough closets converted into separately flushed water closets	..	..	4
Dilapidated privies and ashplaces repaired	..	..	13
Filthy privies cleansed and lime-washed	..	..	12
Offensive accumulations removed	..	..	3
Foul Urinals cleansed	..	..	1
Passages and yards re-flagged or re-paved	..	..	1
Houses supplied with proper water supply	..	..	3
Dilapidated house roofs repaired	..	..	1

Insanitary middenstead removed	1
Slaughter-house drained, repaired, and floor cement concreted	1
Nuisances arising from dirty houses	4
" " blocked main sewers	1
" " leaking and defective urinals	1
" " emission of black smoke	9
" " disused sump	1
" " subsoil water or sewage percolating into cellars	10
" " keeping of swine	1
Factories and Workshops supplied with proper W.C. accommodation	2
Miscellaneous nuisances abated	16
	<hr/>
	689

The 202 house drains trapped plus the 8 houses provided with proper means of drainage are situated as follows:—Central Ward 34, East Ward 51, North-East Ward 12, North-West Ward 35, West Ward 28, South Ward 50, Total 208.

The 126 houses supplied with water-closet and ash-place accommodation are situated as follows:—New Road Side 39, Exley Head 5, Eastwood Square 3, Beck Street 21, South Street and Hey's Gardens 23, Oak Street and Well Street 9, Oakworth Road and Gladstone Street 10, Beechcliffe 2, Westgate 4, Mount Street, West Turkey Street and Lustre Street 10. Their distribution in the various Wards are as follows:—Central Ward 21, East Ward 39, North East Ward 3, North-West Ward 11, West Ward 20, South Ward 32, Total 126.

The closets provided were of the following types:—

Separate flushed wash down water closets ...	136
Pail Closets	12
	<hr/>
	148

The following works included in the foregoing list were executed by our own staff of workmen, or by contract under your Department:—

Defective house drains, cleansed, trapped and re-laid ..	128
Water closets, waste water closets, and Latrine closet drains opened and cleansed	36
Houses supplied with separate water closet and ash-place accommodation	24
Pail closets converted into water closets.. .. .	9
Dilapidated privies and ash-places repaired	2
Cow-shed repaired and altered	1
Miscellaneous nuisances abated	23
	<hr/>
	223

The total cost of the works executed by our own staff, inclusive of £5 per cent charged for superintendence, was £965 0s. 9d. and is recoverable from the owners of the premises upon which the work was executed, being done by their authorisation or request.

279 Formal Notices were served viz:—82 for defective or insufficient means of drainage, and 197 for insufficient or insanitary closet accommodation, and I am pleased to be able to report that legal proceedings to compel compliance with these notices were not found necessary. Proceedings had however to be taken in one instance to recover the costs incurred in providing W.C. accommodation in default of notice served, objection being taken by the Defendant to the basis of the charge for the work done, which by our Private Act (under which the work was done) was apportioned amongst the persons benefiting by the improvement, according to the rateable value of their respective property, and in this instance that basis was found to operate very unfairly, the rateable value of the defendants premises being £36, whereas others who received the same benefit in the form of W.C. and ash-place accommodation had to pay on a rateable value of £3 10s. only. The case was left to the discretion of the Justices, who reduced the amount to be paid by the defendant from £64 16s. 1d. to £40. A Provisional Order amending your Private Act so as to allow an equitable apportionment of such expenses to be made in future cases has since been obtained.

UNCOMPLETED MATTERS IN HAND.

Houses requiring proper waste water closet and ash-place accommodation	224
Houses requiring proper dry ash tubs	42
„ with defective and untrapped drains	146
„ without proper means of drainage	19
„ requiring connection to main sewer	6
„ without proper water supply	16
Ash-place floors to reflag	22
Factories under notice to provide additional Sanitary conveniences	5
Miscellaneous nuisances to abate	14
Matters remaining on Register, Dec. 31st, 1904	494

Houses with foul and Insufficient Sanitary Conveniences.—The 224 houses remaining on the register to be dealt with during 1905 are located in the Wards as follows: Central Ward 53, East Ward 15, North-East Ward 17, North-West Ward 68, West Ward 56, South Ward 15, Total 224.

Defective or Insufficient House Drains.—The 165 remaining upon the register unabated at the close of the year are

located in the various Wards as follows :—Central Ward 29, East Ward 51, North-East Ward 21, North-West Ward 19, West Ward 34, South Ward 11, Total 165.

SMOKE OBSERVATIONS.

The following list shows the number of observations taken, the name of the firms whose chimneys have been under observation, and the maximum and average number of minutes black smoke emitted per hour by each chimney whilst under observation :—

NAME.	ADDRESS.	No. of observations taken for a period of 60 minutes.	No. of minutes dense smoke emitted per hour.	
			Maximum.	Average.
1. Anderton Bros.	Hardings Lane	19	Nil	Nil
2. Bairstow, W. & J.	Mantra Mills, South St.	19	„	„
3. Baldwin, James	Parkwood St. Brass Wks.	19	„	„
4. Baths & Wash-houses	Albert Street	19	„	„
5. Baxendall & Dixon	Ingrow Corn Mills	19	„	„
6. Beadman, J. B. & Co.	Railway Wagon Works	19	„	„
7. Blakey, John	Low Bridge Corn Mill	19	„	„
8. Bottomley, J. & Sons	Adelaide Street	19	„	„
9. „	Park Street	19	„	„
10. Brigg, John & Co.	Calversyke Mill	19	7	1.05
11. Brigg, J. & F.	Parkwood Brick Works	19	1	.05
12. Brooksbank, E. & Co.	Station Oil Wks, Thwaites	19	Nil	Nil
13. Brooksbank, R.	Beck Street	19	„	„
14. Butterfield, David	Central Iron Works	19	1	.21
15. Cattle, W. W.	Eastwood Brewery	19	„	„
16. Clapham Bros.	Wellington Foundry	19	1	.05
17. „	Market Street	19	3	.55
18. „	Lawkholme Lane	19	Nil	Nil
19. Clegg & Howgate	„	19	„	„
20. Clough, Robert	New Grove Mills	19	3	.16
21. „	Old	19	Nil	Nil
22. Clough, Robert	Botany Mills, Dalton Lne	19	„	„
23. Cooke, Jesse	Greengate	19	28½	1.71
24. Dalton Mills Co.	Dalton Lane	19	5	.26
25. Darling & Sellers	Airedale Tool Works	19	Nil	Nil
26. Dawson, Bentley & Co.	Paragon Iron Works	19	„	„
27. Dean, Smith & Grace	Worth Valley Tool Works	19	2	.10
28. Dickinson, J. & Co.	Devonshire Brass Works	19	3	.31
29. Dixon, John	East Parade	19	6	1.58

NAME.	ADDRESS	No. of observations taken for a period of 60 minutes.	No. of minutes dense smoke emitted per hour.	
			Maxi- mum.	Aver- age.
30. Earnshaw, James	Russell Street	19	2	·10
31. Farrer, Thomas	Borough Brass Works	19	Nil	Nil
32. Firth, I. & Co.	Beech Mills	19	1	·05
33. Fleece Mills Co.	Fleece Street	19	Nil	Nil
34. Foulds, I. & Son	Parkwood Street	19	„	„
35. Great Northern Rail- way Co.	Low Mill	19	12½	3·84
36. Greenwood, A.	Russell Street Tannery	19	Nil	Nil
37. Haggas, J. & Co.	Ingrow Lane	19	3	·16
38. Haggas, Shelah	Sun Street, Greengate	19	Nil	Nil
39. Hall & Stell	Park Works, Dalton Lane	19	4	·21
40. Hanson, Chas. & Co.	Cabbage Mill	19	Nil	Nil
41. Hattersley, Geo. & Co.	North Brook Works	19	4½	·05
42. „	Heber Street	19	Nil	Nil
43. Hird, I. & Sons	Acres Mill	19	1	·05
44. Holmes & Pearson	Starkie Street	19	1	·05
45. Hoyle & Colburn	Market Street	19	Nil	Nil
46. Hugill Bros.	Dalton Lane	19	2	·21
47. Ickringill, Ira & Co.	Eastwood Mill	19	Nil	Nil
48. „	Walk Mill	19	„	„
49. Keighley Ironworks Society	Goulbourne Street	19	„	„
50. Keighley Corporation	Electricity Station	19	„	„
51. Keighley, S. & Co.	Low Street	19	2	·10
52. King, Aaron & Co.	Cooke Lane Brewery	19	Nil	Nil
53. Lambert Bros.	Castle Mill	19	„	„
54. Laycock, E. & Co.	Aireworth	19	„	„
55. Lund, Wm. & Sons	North Brook Works	19	6	·89
56. Marriner, E. & Co.	Greengate	19	1	·10
57. Marriner, Son & Naylor	„	19	Nil	Nil
58. Mitchell, D. & Co.	Parson Street	19	„	„
59. Mitchell, J. & Co.	Stockbridge	19	„	„
60. Miley's Machine Tool Co.	Dalton Lane	19	„	„
61. Mountain, W. & Sons	Alice Street	19	„	„
62. Murton & Varley	Anchor Works	19	„	„
63. „	Victoria Chair Works	19	„	„
64. Magma Co.	Brewery Street	19	2	·10
65. Normington Bros.	Marley Street	19	2	·21
66. Rishworth Bros.	Old Corn Mill, Beck's Rd.	19	Nil	Nil
67. Rustless Iron Co.	Dalton Lane	19	„	„
68. Sellers, Wm. & Sons	Lawkholme Lane	19	„	„
69. Scaife, Samuel	South Street	19	1	·05
70. Silverwood, Thomas	Drury Niche	19	Nil	Nil
71. Smith, John (Keighley Ltd.)	Alice Street	19	„	„
72. „	Bradford Road	19	„	„
73. Smith & Paget	Parker Street	19	„	„
74. Smith, Swire & Bro.	Springfield Mills	19	3	·16

NAME.	ADDRESS.	No. of observations taken for a period of 60 minutes.	No. of minutes black smoke emitted per hour.	
			Maxi- mum.	Aver- age.
75. Smith, H. & Son	Goulbourne Street	19	1	·05
76. Smith, Prince & Son	Burlington Shed	36	37	3·76
77. do.	Timber Wks., Lawkholme	19	Nil	Nil
78. Smith, John	Green Street	19	„	„
79. Spencer, John	Pitt Street	19	„	„
80. Stell, Thomas	Starkie Street	19	„	„
81. Summerscales, W. & S. Sons, Ltd.	Coney Lane	19	2	·10
82. „	Royd Works	19	Nil	Nil
83. Summerscales, W. & S. Sons	Parkside Works	19	„	„
84. Thompson, S., and S. Mitchell	Hanover Street	19	5	·89
85. Taylor, Timothy	Knowle Spring Brewery	19	Nil	Nil
86. Tomlinson, Robert	Russell Street	19	„	„
87. Thorpe, Johnson & Co.	Goulbourne Street	19	„	„
88. Ward, Haggas & Smith	Parson Street	19	„	„
89. Weatherhead, D. & F.	Cooke Lane Mills	19	„	„
90. Wells, Jonas	Greengate	19	3	·16
91. Whalley, Geo. & Co.	Dalton Lane	19	1	·05
92. Wilson, Thomas	Low Bridge	19	2	·21
93. Wilkinson, Geo. & Co.	Bradford Road	19	Nil	Nil
94. Wright Bros.	Prospect Mills	19	„	„
95. „	Ingrams Mill	19	„	„
96. „	Damems	19	„	„
97. Whitehead, Tom	Westgate	19	„	„
98. Whitehead, James & Son	„	19	„	„

Arising upon my reports presented to your Committee from time to time, formal notices to abate nuisances arising from the emission of black smoke from chimneys in connection with factories and other works within the borough have been served upon nine firms ; also letters of warning following service of notice have been addressed to five firms, and copies of photographs of the chimney complained of, taken at the time of the observation, have usually been enclosed with such notices and letters.

Whenever I observe the emission of black smoke by any chimney, it is my practice to if possible at once call upon the offending firm, their fireman or both, or otherwise to acquaint the firm of the matter by telephone, and any explanation or excuse they may be able to offer is reported to your Committee along with the report of my observations. It will be noticed that the chimney numbered 76 in the foregoing list frequently offended during the early part of the year. The firm in question ascribed the cause

of the nuisance to the fact that their chimney, in addition to doing duty for their three boilers, serves also extensive case-hardening furnaces, and they contended that in the firing of the latter furnaces,—although constructed upon the best known principles and carefully tended,—black smoke is at times unavoidable. They were of opinion that the nuisance arose solely from their case-hardening furnaces, and invited any suggestion whereby the emission of black smoke could be prevented. Accompanied by one of my assistants I spent several half-days at the works in question, taking observations of the methods and times of firing both boilers and case-hardening furnaces, and in taking note of the density of the smoke and the periods of black, light, and other smoke emitted during the periods under observation, with the result that I was able to demonstrate that the nuisances arose mainly from indifference and want of care on the part of the two boiler firemen. Ultimately this firm found it necessary to discharge one of their firemen, and since that date, now some months ago, we have had no serious cause for complaint against this chimney.

Chimney No. 35 on the list has for years given more or less cause for complaint, and your Committee have in the past year allowed this firm every possible latitude, in consideration of the fact that the factory in question is in part dependent for power upon a water-wheel which they have found it necessary to replace by a new turbine, and in consequence additional work has been thrown upon the boilers whilst the alteration was in progress. Since the completion of the turbine, this chimney has turned out considerably less black smoke; nevertheless, the nuisance will, I fear, be a continually recurring one until the chimney at this factory be replaced by one of more liberal dimensions.

FACTORY AND WORKSHOPS ACTS.

The following is a summary of my register of workshops within the Borough. The whole of the workshops in this list have been measured up, cards stating the number of persons who may legally be employed therein have been posted in each room, and due attention has also throughout the year been paid to cleanliness, ventilation, sanitary conveniences, and drainage. For the number of visits paid to workshops by my two assistants, please refer to their "List of Visits" in the appendix hereto.

Trade or Business.		No. of rooms.	No. of Persons employ'd	No. of Persons who may legally be employed.	
Description.	No.			Ordinary	Overtime
Tailors	26	38	165	382	230
Drapers, Dress & Mantle Makers, Costumiers, and Milliners ..	35	43	158	337	201
Hosiery & Shirtmakers..	3	3	18	44	26
Shoemaker, Cloggers, & Saddlers	25	29	71	244	145
Tinners & Plumbers ..	4	5	18	143	89
Jewellers	7	7	13	55	32
Tripe Dressers, &c. ..	4	4	10	69	42
Cycle Makers	2	2	4	20	12
Skep Makers	2	2	2	17	10
Blacksmiths	2	2	5	76	48
Pork Butchers	3	3	5	14	8
Bakers & Confectioners Underground	15	18	20	86	51
Other than Underground	28	31	69	276	167
Upholsterers, &c. ..	3	4	9	57	31
Totals	159	191	567	1820	1092

Part 3 of the Public Health Acts Amendment Act, 1890, being in force within the Borough, the responsibility of securing the provision of suitable and sufficient sanitary conveniences for persons of both sexes employed in factories and workshops, rests with the Town Council, a report of the Borough Surveyor being a necessary precedent to action, and during the past year, accommodation of this nature has been required at eight factories and workshops. At 3 of these premises the required accommodation has been provided, and at the remaining 5 premises the required works are in progress.

Shop Hours Act.—Attention has been paid to the provisions of this Act, and in several instances where the prescribed notices had been misplaced, fresh notices had been required. I have not received complaint of any breach of this Act which prohibits the employment of young persons, that is to say persons under the age of 18 years, for a longer period than 74 hours, including meal times, in any one week. So long as the Tuesday half-day closing remains an institution within the Borough, there is little probability of the prescribed number of hours being exceeded.

Seats for Shop Assistants Act. — The provisions of this Act are I believe, generally observed by our Shop-keepers, I have never received a complaint of want of accommodation of this nature, or of any restricted use of the seats provided.

OFFENSIVE TRADES.

Bye-laws for the regulation of the following offensive trades are in force within the Borough viz:—The trades of a blood boiler, blood drier, bone boiler, fell-monger, tanner, leather dresser, soap boiler, tallow melter, fat melter, tripe boiler, glue maker, size maker, and gut scraper. The number of such offensive trades in the Borough are as follows:—4 tanners and leather dressers, 1 leather dresser, 1 gut scraper, 4 tripe boilers, and 1 tallow melter. Complaints of effluvium from the last-mentioned premises having again been received by your Committee. The construction of a chimney at least 20 yards in height, and the provision of means to render innocuous all vapour arising from the process of tallow and fat melting on these premises has been required, and steps to meet your Committee's requirements are being taken.

With respect to the other premises referred to in this list, I am not aware of any cause for complaint.

Case-hardening, although it does not come within the provisions of the above-mentioned bye-laws, is subject to certain provisions of your Private Acts, and, although this process is extensively carried on by several firms, no complaint of effluvium therefrom has been received during the year.

COMMON LODGING HOUSES AND HOUSES LET IN LODGINGS.

There are within the Borough six Registered Common Lodging-houses, with accommodation in the aggregate for 397 persons. There has been no increase in the number of such houses for many years, and at the present time the accommodation is far in excess of the demand, and it therefore of necessity follows that there has been no over-crowding. The whole of these houses have been regularly visited week by week, and, although the standard of the accommodation provided is below that of a well-managed Municipal Lodging-house, all have been kept in a very clean and fairly satisfactory condition, and I have no breach of your Lodging-house Regulations to report. As previously stated herein,

the provisions of Section 83 of the Public Health Act, 1875, whereby Common Lodging-house keepers may be required to report daily every person who resorted to such house during the preceding night, have been enforced throughout the year, with a view to the prevention of the spread of Small-pox.

In addition to the before-mentioned Registered Common Lodging-houses, there are within the Borough 20 houses or 22 rooms Registered to be "Let in lodgings or occupied by members of more than one family." Compared with the preceding year this is a reduction of 9 such rooms. The houses now on this register are with two exceptions back to back houses which are let as "Furnished Apartments" and each is occupied on an average by two persons only. There has been no over-crowding, the whole of the houses are properly drained, and are supplied with water and sanitary conveniences, but the class of "furniture" provided, and the habits of the occupants of these rooms in some instances leave much to be desired.

VAN-DWELLINGS ATTENDING FAIRS.

Attention has been paid to the van-dwellings of persons attending the Spring and Autumn fairs, with a view to securing due observance of your Bye-laws as to the provision of sufficient and suitable sanitary conveniences, water supply, refuse disposal, and the cleanliness of their dwellings, and as a precaution against the introduction of infectious disease. In all instances very satisfactory sanitary arrangements were made, and a clean bill of health was shown.

DAIRIES AND COWSHEDS.

57 persons are registered as purveyors of milk within the Borough, 8 of whom reside outside the Borough limits. The milk purveyor's premises are generally kept in a very cleanly condition, and your Regulations requiring the provision of lids to their cans is complied with by all. Very few of our milk dealers sell at their homes, the milk generally being taken direct from the farmer to their customer's door.

The following list shews the number of farmsteads, the number of registered cowsheds thereon, the number of cows kept, the number of cowsheds with the Regulation 600 cubic feet of air space per cow, and the number of sheds with an insufficiency of air space, together with the extent of such deficiency.

Number of Farmsteads.	Number of Cowsheds	Permissible Number of Cows.	Number of Cows kept	Air space per cow.
64	102	629	569	600 cubic ft. or more.
	1	2	2	600 " "
1	1	6	9	450 " per cow.
	1	5	6	567 " "
1	1	5	8	426 " "
	1	6	7	531 " "
1	1	7	8	566 " "
1	1	6	8	452 " "
1	1	3	6	372 " "
69	110	669	623	

In addition to the above there are within the Borough 10 occupied farmsteads upon which no dairy cows are kept.

My last annual report shewed a deficiency of air space at 25 cowsheds ; this year the number has been reduced to 7 sheds upon 5 different farms and unless the required alterations in these few instances are made in the coming Spring, legal proceedings should be taken. At one of the farms in default a change of tenant will take place in March and the owner has not therefore considered it wise to make alterations which a new tenant may not require.

With one exception, the 18 cowsheds reconstructed or refitted during the past year have also been provided with proper drainage and manure midden accommodation ; the paving of floors has been put into good order ; proper means of ventilation have been provided, and window space equal to $\frac{1}{15}$ the floor area has in each case been insisted upon. In the instance where this has not been done I have the owner's assurance that the required amendment will be made in the coming Spring.

DISEASES OF ANIMALS ACTS.

Swine Fever.—There were 18 outbreaks of suspected Swine Fever, affecting premises upon which in the aggregate 151 pigs were kept, and the requirements of the Swine Fever Order of 1894 with regard to the closing of suspected and adjacent premises, and the disposal of the carcasses of pigs dead from suspected fever, were duly observed. In one of the instances only, the Veterinary Officers of the Board of Agriculture certified the illness to be due to Swine Fever.

Arrangements have been made with the Superintendent of Police for the granting by the Police, of all movement licenses under the provisions of the Swine Fever Orders and Regulations, and Mr. Superintendent Tebbutt informs me that during the year 755 licenses to move Swine into the Borough were given, and 128 licenses for movement out of the Borough.

Sheep Scab.—The only other disease notified under the provisions of the above Acts, was one outbreak of Sheep Scab, affecting 3 out of a flock of 10 sheep agisted with a farmer at Moss Carr.

Rabies Order.—I am indebted to the Superintendent of Police for the following return shewing the number of dogs seized by the Police during the past year.

No. of Dogs seized.	No. of Dogs claimed by their Owners.	No. returned to finder.	No. of Dogs destroyed.	
			Stray Dogs.	At Owner's request.
43	11	1	31	14
Total ..			57	

SLAUGHTER-HOUSES AND FOOD INSPECTION.

In addition to your Public Abattoir, at which about $\frac{1}{3}$ of the meat sold within the Borough is dressed and prepared, we have now 13 private slaughter houses, 4 of which are licensed for twelve months only. At one of these private slaughter-houses the walls have been required to be cement plastered; the floor has been relaid with cement concrete in substitution for a flagged floor which had fallen into a very bad state of repair, and improved means of drainage and of access to the said slaughter-house have also been required.

The whole of the private slaughter-houses have been kept under strict inspection week by week, and a vigilant watch has also been maintained over the shops and stalls where meat, fish, fruit, and other articles of food are exposed or offered for sale, and I have pleasure in reporting that it has not been found necessary to make any legal seizures of food.

I have had no reason to complain of non-observance of such of your slaughter-house Regulations as relate to cleanliness ; but in one instance I had to report a butcher to you for obstruction, and for non-observance of your Regulation requiring notice to be given to me immediately evidence of disease is discovered in any animal slaughtered for sale for the food of man. The circumstances in connection with this case were fully reported to and considered by your Committee at the time, and the butcher having attended before you and tendered an apology for his conduct, and given assurance that he would give every assistance and facility for inspection to your officers in future, the case was not carried before the Justices. Sixty-six notices of diseased conditions in carcasses prepared for sale were given by butchers during the year, and 22 other cases came to my notice or to the notice of my assistants in visiting slaughter-houses whilst slaughtering was in progress. A number of these cases were reported to your Medical Officer of Health for his opinion thereon, and in 14 instances your Veterinary Inspector was also consulted.

The following is a summary of the Meat surrendered and destroyed during the year as being diseased, unsound, or unwholesome, and unfit for the food of man :—

TUBERCULOUS MEAT.

	Weight.
5 carcasses of beef, together with all offal belonging thereto.. .. .	224 stones.
9 carcasses of pork, together with all offal belonging thereto.. .. .	89 „
Tuberculous livers, lungs and other portions of carcasses	64 „

MEAT AFFECTED WITH DISEASE

OTHER THAN TUBERCULOSIS.

2 carcasses of pork, together with all offal belonging thereto.. .. .	15 stones.
Diseased beast, sheep and pig livers and lungs destroyed	14 „
Total weight of meat destroyed	406 „
Unsound fish surrendered and destroyed	18 „
Total	424 stones.

FRIED FISH SHOPS.

There are 35 fried fish and chipped potato shops within the Borough, and all have been kept systematically under inspection at irregular intervals. I have no complaint to make respecting any of these premises, or of the quality of the fish prepared and offered for sale thereat; but in one or two instances I have had to require accumulations of empty but offensive fish-kits to be removed. The proprietor of one of these shops reported and surrendered for destruction 3 stones of fish which was delivered to him by rail in an unsound condition.

SALE OF FOOD AND DRUGS ACTS.

Being aware that the County Food and Drugs Inspector was paying a good deal of attention to the taking of samples under the above Acts within the Borough; I have not taken energetic action also; but in October, having reason to suspect that at a shop opened early in the year, and known as "The Royal Arcade Creamery," Margarine was being sold as "Pure Butter, 10d. per lb.," I purchased two samples—one personally, and one by the hands of a workman in my employ—and the latter sample, upon analysis, was found to be margarine. I had very considerable difficulty in establishing the identity of the proprietor of this shop, but ultimately succeeded in connecting him with a similar shop in Leeds, at which his salesman there had recently been fined for refusing to sell butter to an Inspector. My cases were ably conducted by Mr. W. A. Brigg on behalf of the Town Clerk, summonses being issued separately against both the master and the salesman (*a*) for selling an article not of the nature, substance and quality demanded, and (*b*) for delivering margarine to the purchaser without the prescribed wrapper. Upon the latter count the defendant master took advantage of the provision of the Margarine Act enabling him to charge his salesman with the offence, but as we were able to prove several previous convictions against both his salesmen employed at the Keighley shop, and as in cross-examination he had to admit knowledge of the character of the men he employed, the Justices found both defendants equally guilty, and inflicted upon each on the first count a penalty of £20 and costs, and on the second count a penalty of £5 each and costs—a total of £50 and costs—or in default 4 months' imprisonment each. As the proprietor's residential address was not known, his business in Leeds had been disposed of before the hearing of the summonses, and the goods in the Keighley shop were insufficient to meet the penalty, both defendants were committed to prison in default of payment, and the Keighley shop did not again

open. The proprietor, however, only served a month of his term, being released upon payment of reduced fines and costs amounting to £22 4s. 10d., but the salesman was left to complete his term.

Mr. A. Randerson, the County Inspector under the Sale of Food and Drugs Acts, has kindly supplied the following particulars of samples procured, and proceedings taken by him within the Borough during the year.

Article Purchased.									Number of samples.
Black Beer	..	..	..	..	..	..	..	..	1
Margarine	..	..	..	..	..	..	..	..	1
Butter	..	..	..	..	..	..	..	..	13
Milk	..	..	..	..	..	..	..	..	20
Camphorated Oil	..	..	..	..	..	..	..	..	1
Pepper	..	..	..	..	..	..	..	..	1
Cocoa	..	..	..	..	..	..	..	..	1
Tincture of Rhubarb	..	..	..	..	..	..	..	..	2
Coffee	..	..	..	..	..	..	..	..	5
Jam	..	..	..	..	..	..	..	..	2
Total									47

All the samples were certified by the Public Analyst to be genuine with the exception of black beer, this was found to contain $\frac{1}{60}$ grain per gallon of arsenic; the vendors were warned by the West Riding Solicitor.

One vendor of milk has been proceeded against for refusing to sell new milk for analysis; he was fined £1 and costs 15/-; this was his second offence.

(Signed) A. RANDERSON.

“County Inspector under the Sale
of Food and Drugs Act.”

Town Hall, Skipton,

March, 1905.

PETROLEUM ACTS AND ORDERS.

Under the provisions of the above Acts and Orders, 12 firms were licensed to store petroleum (Benzoline and Motor Spirit) in quantities varying from 40 to 400 gallons subject to compliance with your usual conditions of License, and the Gas Department were also Licensed to store 1000 gallons of Benzoline.

One firm was licensed to store Carbide of Calcium in quantities not exceeding 40 tons.

Owners of Motor-cars and cycles should know that they are liable to a penalty not exceeding £10 if they store Petrol or motor spirit in any building situate within 20 feet of any other building unless notice of the fact be given to you in the month of January in each year, and that they are not allowed in any case to keep more than 60 gallons of petrol in separate 2 gallon metal vessels without a license. These and other regulations are contained in an order made by the Secretary of State on March 18th, 1903, nevertheless no such notice has yet been given by the owner of any motor-vehicle within the Borough.

Similarly users of Carbide of Calcium for generating acetylene gas in lamps should be aware that the Petroleum Acts apply also to Carbide, and that by the Statutory Rules and Orders of 1904 No. 1659, the quantity of Carbide which may be kept without a license is as follows :—

1. Where the Carbide is kept in separate hermetically closed metal vessels containing not more than 1 lb. each- 5 lbs.
2. Where the following conditions are observed.....28 lbs.
 - (a) The Carbide shall be kept only in a metal vessel or vessels hermetically closed at all times when the Carbide is not actually being placed in or withdrawn from such vessel or vessels.
 - (b) The vessel containing Carbide shall be kept in a dry and well ventilated place.
 - (c) Due precautions shall be taken to prevent unauthorised persons from having access to the Carbide.
 - (d) Notice shall be given of such keeping to the Local Authority, and free access shall be afforded to their duly authorised Inspector to inspect the portion of the premises where the Carbide is kept, and the generator is situated.
 - (e) × × × × × × × × × × × (f) × × × × × × × × × ×

Where it is desired to keep a greater quantity, or where the above conditions cannot be complied with, application must be made to the Local Authority for a License.

Before 1903 the petroleum Acts were not considered applicable to quick drying paints and varnishes, and therefore no action has been taken with regard to the use of such low flash paints within the Borough. All makers of washing and wringing machines, etc., in the town are users of this class of paint and varnish, and although such paints give off an inflammable vapour

at temperatures much below 73 deg. F. and are usually kept in bulk in fitting-shops lighted by gas, I am not aware that any serious accident has yet occurred therefrom, nevertheless, taking into consideration the fact that petroleum vapour is given off at ordinary temperatures, that it is heavier than air, and therefore not readily diffused, and that when mixed with air it forms an explosive atmosphere, there must be an element of danger in the practice referred to. Now that such paints and varnishes, thinned by the further admixture of petroleum spirit (benzoline), are being used for the dipping of wringing machine frames and bedsteads in open tanks containing about 200 gallons of such highly inflammable mixture,—the dipping and drying being done in closed rooms lighted by naked gas lights, and without any special provision for ventilation,—it rests with your Committee to decide whether the last mentioned practice especially shall be allowed to continue without some precaution being taken against accident by explosion or fire.

REFUSE REMOVAL.

The following list shews the quantity of refuse removed, and for comparison the preceding year's returns are also shewn :—

	1904.		1903.	
	Loads.	Weight in Tons.	Loads.	Weight in Tons.
Dry ashes from ash-tubs ..	10349	11642	10324	11614
Closet pail contents ..	2260	2712	2331	2797
Midden privy contents ..	142	170	263	316
	<u>12751</u>	<u>14524</u>	<u>12918</u>	<u>14727</u>

In addition to the above, we also removed and destroyed 72 mattresses and beds, 406 stones of diseased meat, 18 stones of unsound fish, and the carcasses of 33 dogs.

It will be seen that the number of loads of midden privy and pail contents continues to decrease in consequence of the conversion of such privies into water closets.

The following statement shews the cost of the collection, cartage and disposal of refuse, and also shews the total cost of the department on both Refuse Removal and Nuisance Removal accounts :—

REFUSE COLLECTION AND DISPOSAL—							
					£	s.	d.
Team Labour .. .. .	..	..	..	..	1545	13	10
Manual Labour .. .. .	..	..	..	..	678	2	9½
Total cost of Collection, Cartage, and disposal of Refuse and excrement ..					2223	16	7½

Brought forward	£2223	16	7½
Cart Repairs and Cart Covers	37	13	1
New Ash-tubs and Repairs of old Ash and Excreta Tubs	224	3	10
Disinfectants, Creosote, and Tar	19	19	9
Shovels, Baskets, and sundry Tools and Materials	37	16	7½
Rates, Taxes, Coal and Gas at Depot and Tip	32	4	1
Special Expenditure.—Part cost of Pav- ing Roadway leading to Tip	79	17	8
	<hr/>		
	£2655	11	8
Credit Accounts.—By Sales of Ash-tubs and Removal of Trade Refuse	186	13	6
	<hr/>		
Total Cost of Refuse Removal Department ..	£2468	18	2

NUISANCE REMOVAL DEPARTMENT—

To Stationery, Books, Forms, Law Costs, Postages, and sundry Office expenses	59	8	6½
	<hr/>		
Total Expenditure ..	£2528	6	8½
	<hr/>		

The foregoing particulars show that the Collection, Cartage and Tipping of Refuse cost on an average 3s. 0¾d. per ton.

STREET CLEANSING.

With the exception of North Street and Skipton Road, which are main or County Roads, your Department undertakes the sweeping, watering and cleansing of all paved roadways, and the emptying of all street gullies therein. North Street and Skipton Road, and also all roadways formed with Macadam are entirely under the charge of the Highways Department.

A list shewing the streets and roads cleansed by your Department each day in the week is given as an appendix to this report.

The following is a summary of the work done during the year, the preceding year's figures being also shewn for comparison :—

	1904. Loads.	1903. Loads.
Street sweepings and gully pan contents collected ..	3126	3279
Snow carted out of streets	5540	94
Sand used on roadways and footpaths	160	72
Ashes used on „ „	50	
Water used by street watering carts	2158	1774
	<hr/>	
Total Number of Loads	11034	5219
	<hr/>	

The expenditure of this Department during the 12 months was as follows :—

	£	s.	d.
Hired Team Labour	556	9	3½
Manual Labour	666	7	3
	<hr/>		
Total Wages	1222	16	6½
Cart and Sweeping Machine Repairs	43	14	1
Brushes, Shovels, and other Tools	62	13	10½
Disinfectants, Paints, Oil and Sundries	24	6	5
Rates, Coal and Gas at Depot	18	14	11
	<hr/>		
	£1372	5	10
Credit Accounts.—By sale of Old Brushes	4	10	0
	<hr/>		
Net Expenditure on Street Cleansing	£1367	15	10
Special Expenditure.—Part cost of Paving Roadway leading to Tip	39	18	10
	<hr/>		
	£1407	14	8
	<hr/>		

The foregoing return shews the cost of Street Cleansing during the past year to have been £1367 15s. 10d., as compared with £1108 17s. 7d. during the year ending December, 1903, the increase being entirely due to the exceptional severity of the winter months.

The following return shews your Committee's annual expenditure upon Refuse Removal account (including office expenditure) and Street Cleansing account for each financial year since June 30th, 1894, and also shows the General District Rate and the relation of your expenditure to such rate for each year :—

Year ending 30th June.	Refuse Removal Expenditure.	Street Cleansing Expenditure.	Total Expenditure on both Accounts.	General District Rate per £ rateable value.	Amount realised by a Rate of 1d. in the £.	Rate required to meet expenditure on refuse removal and street cleansing accounts.
1895	£ 1663 9 5	£ 1015 18 6	£ 2679 7 11	3/8 in the £	£ 351 3 2	7.57 pence
EXTENSION OF THE BOROUGH.						
1896	2028 16 1	881 9 11	2910 6 0	3/8	360 0 0	8.08 "
1897	2276 7 8	920 3 0	3196 10 8	3/8	371 0 0	8.61 "
1898	2256 0 11	818 2 8	3074 3 7	4/-	412 12 9	7.45 "
1899	2326 19 1	938 9 1	3265 8 2	4/-	435 1 2	7.50 "
1900	*2663 15 8	1313 4 6	*3977 0 2	4/-	445 17 6	8.92 "
1901	2664 15 5	1098 4 1	3762 19 6	4/8	453 10 0	8.30 "
1902	2728 7 11	1075 16 2	3804 4 1	5/8	471 3 3	8.07 "
1903	2412 16 10	1114 5 0	3527 1 10	5/4	496 7 7	7.10 "
1904	†2622 8 3	1171 12 4	†3794 0 7	5/6	502 4 0	7.55 "

* 1900. Increased Expenditure accounted for as follows:—

Advance for hire of Team Labour: 18 Teams advanced 4/9 per week each = £4 5s. 6d.

per week × 52 weeks per annum £222 6 0

Extra cartage consequent upon the Removal of the Excreta Tipping Tanks from near to Victoria Park to near the Sewage Farm (Payment to the Farm Committee) 180 0 0

This remains an Annual Charge from this date £402 6 0

† 1904. Includes a special Expenditure of £119 16s. 6d. for paving of roadway leading to the Tip, apportioned £79 17s. 8d. to Refuse Removal account, and £39 18s. 10d. to Street Cleansing Account.

In conclusion, I would take this opportunity to acknowledge my indebtedness to my deputy, Mr. William Mitchell, for his energetic and invaluable services in the Cleansing Department, and to my assistants Mr. Foy and Mr. Whitehead for their services in the numerous other duties of the Health Department.

WILLIAM C. HALLER,

Chief Sanitary Inspector.

20th March, 1905.

APPENDIX.

**A.—List of inspections made by Assistant-Inspector
Mr. John Foy, during the Year ending 31st Dec. 1904.**

<i>Re</i> Infectious Diseases, number of houses disinfected	..	..	43
Number of other visits to infected houses	..	..	116
„ inspections of house drainage	..	..	230
„ inspections <i>re</i> dilapidated and dirty closets, ashplaces, and general nuisances..	..	..	420
„ inspections of drainage work done by contractors	..	..	160
„ water tests applied to such drains	..	..	60
„ premises re-drained, and blocked drains opened and cleansed by men under own charge	..	..	183
„ visits to and in connection with such works	..	..	1455
„ inspections of latrines and trough closets	..	..	1610
„ blocked water-closets, waste water-closets, and latrines opened and cleansed	..	..	38
„ inspections to common lodging-houses and houses let in lodgings ..	..	..	84
„ visits to fried fish shops	..	..	70
„ visits to slaughter-houses	..	..	308
„ visits <i>re</i> swine fever	..	..	15
„ workrooms measured up and space calculated	..	..	6
„ other visits of inspection to workrooms	..	..	95
„ visits of inspection to cowsheds	..	..	61
„ visits <i>re</i> filthy houses	..	..	4
„ visits <i>re</i> smoke nuisances	..	..	8
„ inspections <i>re</i> insufficient closet accommodation	..	..	71
„ notices <i>re</i> filthy sanitary conveniences served on tenants	..	..	16

**B.—List of Inspection made by Assistant-Inspector Mr.
Frank Whitehead during the Year ending 31st,
December 1904.**

<i>Re</i> infectious diseases, number of houses disinfected	..	..	139
Number of other visits to infected houses	..	..	169
„ visits and inspections of houses <i>re</i> drainage, insufficient w.c. and ash-place accommodation, filthy closets, and general nuisances	..	..	1395
„ other inspections of drainage work in progress	..	..	316
„ water tests applied to new drains	..	..	87
„ such drains passed	..	..	76
„ inspections of latrine water closets	..	..	1157
„ visits to common lodging-houses	..	..	600
„ visits to houses let in lodgings	..	..	83
„ visits of inspection to fried fish shops	..	..	784
„ visits <i>re</i> swine fever	..	..	34
„ visits and observations <i>re</i> smoke nuisances	..	..	47
„ workrooms measured up and air-space calculated	..	..	12
„ other visits of inspection to workshops	..	..	53
„ cowsheds measured up and sketch plans made	..	..	6
„ other visits to cowsheds	..	..	26
„ visits to slaughter-houses	..	..	322

C.—List of Streets Cleansed.

Shewing by × the day upon which each is cleansed.

STREET NAME.	DAYS CLEANSED.						
	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
High Street	×	×	×	×	×	×	×
Bridge Street and South Street to Goulbourne Street ..	×	×	×	×	×	×	×
Church Street	×	×	×	×	×	×	×
Low Street and East Parade	×	×	×	×	×	×	×
Cook Street and Bow Street to North Street ..	×	×	×	×	×	×	×
Cavendish Street (swept daily if necessary) ..	×	×	×	×	×	×	×
Railway Bridge from Cavendish Street to Dalton Lane	×	×	×	×	×	×	×
Market Street and Market Place	×	×	×	×	×	×	×
Low Mill Lane to Bridge over beck	×	×	×	×	×	×	×
Dalton Lane to Thwaites Lane	×	×	×	×	×	×	×
Brewery Street	×	×	×	×	×	×	×
Milton Street and Thwaites Lane	×	×	×	×	×	×	×
Marlow Street and Lorne Street	×	×	×	×	×	×	×
Through Thwaites	×	×	×	×	×	×	×
Aireworth Road and Aire Street	×	×	×	×	×	×	×
Bradford Road, from Station to Aireworth Road ..	×	×	×	×	×	×	×
Bradford Street	×	×	×	×	×	×	×
Marlborough Street	×	×	×	×	×	×	×
Parson Street	×	×	×	×	×	×	×
Halifax Road, from Goulbourne Street to Ingrow Bridge ..	×	×	×	×	×	×	×
Ingrow Lane to Co-op. Stores	×	×	×	×	×	×	×
Aireworth Street	×	×	×	×	×	×	×
Oakworth Road to Gladstone Street	×	×	×	×	×	×	×
Otley Street, Spring Street, and King Street ..	×	×	×	×	×	×	×
Woodhouse Road	×	×	×	×	×	×	×
Goulbourne Street	×	×	×	×	×	×	×
Princess Street	×	×	×	×	×	×	×
Victoria Road and Apsley Street	×	×	×	×	×	×	×
Coney Lane and Low Bridge	×	×	×	×	×	×	×
Sun Street, from Low Street to Parker Street ..	×	×	×	×	×	×	×
Beck Street, from Sun Street to Damstones ..	×	×	×	×	×	×	×
Longcroft and Sloe Street	×	×	×	×	×	×	×
Victoria Street, from Parker Street to South Street ..	×	×	×	×	×	×	×
Parker Street	×	×	×	×	×	×	×
Dalton Lane to Brewery Street	×	×	×	×	×	×	×
Lawkholme Lane, from Cooke Street to Holy Trinity Church ..	×	×	×	×	×	×	×
Alice Street	×	×	×	×	×	×	×
Low Mill Lane and Pitt Street to Grace Street ..	×	×	×	×	×	×	×
Bow Street to Hanover Street	×	×	×	×	×	×	×
Hanover Street, from Cavendish Street to Low Street ..	×	×	×	×	×	×	×
Queen Street, from Lawkholme Lane to Low Street ..	×	×	×	×	×	×	×
Mill Street	×	×	×	×	×	×	×
Westgate, from High Street to Moorehouse Street ..	×	×	×	×	×	×	×

STREET NAME.	DAYS CLEANSED.						
	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
West Lane to Calversyke Hill	x	..	..	..
Devonshire Street and Devonshire Street West	x	..	..	..
Turkey Street, from High Street to Cross Leeds Street	x	..	..	..
Belgrave Road to Woodville Road	x	..	..	..
Eagle Street	x	..	..	..
Spencer Street, from Eagle Street to Skipton Road	x	..	..	..
Wilkin Street	x	..	..	..
Albert Street and Highfield Lane to Eagle Street	x	..	..	..
Chapel Lane and Russell Street..	x	..	..	..
Scott Street	x	..	..	..
Mornington Street, from Scott Street to North Street	x	..	..	..
Samuel Street and Campbell Street (part)	x	..	..	..
Park Lane, from Low Bridge to Marriner's	x	..	..	..
Broom Street	x	..	..
Parkwood Street to Grace Street	x	..	..

Streets Swept Occasionally.

North View Street, Artic Street (to Clock View Street), and Pattie Street, once per month.

East Avenue, occasionally.

Earl Street, „

Gas House Road, „

Sunderland Street, „

Alkincote Street, „

North Becks Road (to mill) „

Park Lane, from Marriner's to and including Hogholes Lane, occasionally.

Drury Lane, occasionally.

Catherine Street, from South Street to Victoria Road, occasionally.

Berry Lane, do. do. „

Highfield Lane, from Eagle Street to Victoria Hospital „

Mornington Street and Ivy Street, occasionally.

Leylands Lane, occasionally.

D.—Street and Ward List of Infectious Cases Reported.

Name of Street.	Scarlet Fever.		Diphtheria.		Typhoid Fever.		Small Pox.	
	No. of cases.	No. of houses.	No. of cases.	No. of houses.	No. of Cases.	No. of houses.	No. of cases.	No. of houses.
Central Ward.								
Allison Square ..	..	..	..	..	..	..	1	1
Coney Lane ..	..	..	1	1	..	..	..	..
Devonshire Street	1	1	..	..	..	..	..	..
Drill Street ..	..	..	..	..	1	1	..	..
East Parade ..	1	1	..	..	..	..	..	..
George Street ..	1	1	..	..	..	..	..	..
Parker Square ..	..	..	1	1	..	..	..	..
Parker Street ..	..	..	..	..	1	1	..	..
Queen Street ..	..	..	..	..	1	1	..	..
Wellington Street	2	1	1	1	..	..	..	..
Woodhouse Road	..	..	1	1	..	..	..	..
Totals ..	5	4	4	4	3	3	1	1
East Ward.								
Alma Place ..	..	..	1	1	..	..	..	..
Barrett Street ..	..	..	1	1	..	..	..	..
Cliffe Terrace ..	2	1	..	..	..	..	..	..
Damems Road ..	..	..	2	1	..	..	..	..
Ebenezer Square	..	..	..	..	1	1	..	..
Glen Lee ..	..	..	1	1	..	..	..	..
Hainworth ..	1	1	..	..	..	..	..	..
Harcourt Street..	..	..	1	1	..	..	..	..
Moss Carr Terrace	..	..	1	1	..	..	..	..
Park Lane ..	..	..	1	1	..	..	..	..
Parkwood Street	..	..	2	1	..	..	..	..
Plum Street ..	1	1	..	..	..	..	..	..
Quarry Street ..	..	..	1	1	..	..	..	..
Thames Street ..	..	..	1	1	..	..	..	..
Wesley Place ..	1	1	..	..	..	..	..	..
Whinswood ..	1	1	..	..	..	..	..	..
Woodhouse Road	1	1	..	..	..	..	..	..
Wood Street ..	..	..	..	..	1	1	..	..
Worthville Ter...	2	1	..	..	..	..	..	..
Totals ..	9	7	12	10	2	2	..	..

Name of Street.	Scarlet Fever.		Diphtheria.		Typhoid Fever.		Small Pox.	
North-East Ward.	No. of cases.	No. of houses.	No. of cases.	No. of houses.	No. of cases.	No. of houses.	No. of cases.	No. of houses.
Arthur Street ...	2	2	...	...	...	...	...	...
Berry Street ...	...	...	1	1	...	...	...	...
Bradford Street...	1	1	2	2	...	...	...	...
Bright Street ...	2	2	...	...	...	...	...	...
Cherry Street ...	1	1	...	...	...	...	...	...
Church Street ...	...	...	2	2	...	...	...	...
Dalton Lane ...	...	...	1	1	...	...	...	...
Derwent Street...	...	...	1	1	...	...	...	...
Florist Street ...	1	1	...	...	...	...	...	...
Eastwood Square	...	...	1	1	...	...	...	...
Garden Street ...	2	1	...	...	...	...	...	...
Hard Ings Road	1	1	...	...	...	...	...	...
Lawkholme Lane	...	...	...	...	1	1	...	...
Lorne Street ...	1	1	...	...	...	...	...	...
May Street ...	2	1	...	...	...	...	...	...
Park Grove ...	...	...	1	1	...	...	...	...
Parson Street ...	...	...	1	1	...	...	...	...
Oastler Street ...	2	1	...	...	...	...	...	...
River Street ...	1	1	...	...	...	...	...	...
Rystone Street ...	...	...	2	1	...	...	...	...
Victoria Avenue	1	1	...	...	...	...	...	...
Victoria Park St.	...	...	...	...	1	1	...	...
Totals ...	17	14	12	11	2	2	...	...
North-West Ward.								
Agnes Street ...	2	2	...	...	...	...	...	...
Ashleigh Street...	...	...	1	1	...	...	...	...
Beatrice Street ...	...	...	...	...	1	1	...	...
Brigg Street ...	1	1	...	...	...	...	...	...
Cark Road ...	1	1	...	...	...	...	...	...
Cartmel Road ...	...	...	1	1	...	...	...	...
Cliffe Street ...	1	1	...	...	...	...	...	...
Clock View Street	...	...	1	1	...	...	...	...
Devonshire Street	...	...	1	1	...	...	...	...
Devonshire St. W.	...	...	1	1	...	...	...	...
East Avenue ...	1	1	...	...	...	...	...	...
Highfield Lane ...	...	...	1	1	...	...	...	...
High Utley ...	1	1	...	...	...	...	...	...
High Well Street	2	1	...	...	...	...	...	...
Laurel Grove ...	1	1	...	...	...	...	...	...
North Street ...	...	...	1	1	...	...	...	...
Redcliffe Street...	...	...	...	...	1	1	...	...
Skipton Road ...	...	...	...	...	1	1	...	...
Spencer Street ..	...	...	...	...	...	...	1	1
Stoneycroft Ter.	1	1	...	...	...	...	...	...
Whinburn ...	1	1	...	...	...	...	...	...
Totals...	12	11	7	7	3	3	1	1

Name of Street.	Scarlet Fever.		Diphtheria.		Typhoid Fever.		Small Pox.	
West Ward.	No. of cases.	No. of houses.	No. of cases.	No. of houses.	No. of cases.	No. of houses.	No. of cases.	No. of houses.
Baptist Square ...	2	1	...	...	...	...	1	1
Braithwaite ...	1	1	...	...	...	...	...	...
Calversyke Hill...	4	2	...	...	...	...	...	...
Exley Head ...	...	...	2	2	...	...	...	...
Mohair Street ...	...	...	1	1	...	...	...	...
Oakworth Road...	1	1	...	...	...	...	...	...
Unity Street ...	1	1	1	1	...	...	...	...
West Lane ...	...	...	1	1	...	...	...	...
Wheathead Lane	...	...	1	1	...	...	...	...
Totals...	9	6	6	6	...	...	1	1
South Ward.								
Apsley Street ...	...	...	2	1	...	...	...	...
Back South St.	1	1	...	...	...	...	...	...
Chelsea Street ...	1	1	1	1	...	...	...	...
Clarendon Street	1	1	...	...	...	...	...	...
Colne Street ..	...	...	1	1	...	...	...	...
Croft Place ...	...	..	1	1	...	...	...	...
Junction Street...	...	...	1	1	...	...	...	...
King Street ...	1	1	...	...	...	...	...	...
Malsis Road ...	1	1	...	...	...	...	...	...
Peel Place ...	...	...	...	...	1	1	...	...
Pickles Street ...	1	1	...	...	...	...	...	...
Portland Place ...	...	..	2	2	...	..	...	...
Rutland Street	2	1	...	...	...	...	...	...
Totals...	8	7	8	7	1	1	...	...

